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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. It show 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 forbids the entry of water or other easy electricity-conductive metal objects such as iron powder

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

9. LED display is composed of many electric components which have power consumption, although a single component has low power consumption, but we cannot despise the power consumption produced from many components working at the same time. The continuous long-time use will emit heat in large quantities and accelerate the attenuation of LED lamps and affect their lifetime, so please pay attention to the treatment of heat emission.

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

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

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

13. Every month check once the 220V AC power and heat emission equipment inside LED display

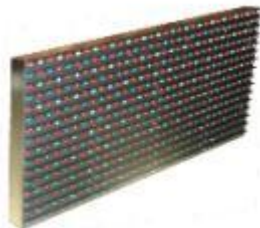
14. Do not change easily the fixed technical parameter setup by manufacturer. If the parameter is not set correctly, the display quality of screen will be affected much.

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

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

Subassembly Instruction

1. The module is the smallest unit of outdoor full color LED display, modules are composed into cabinets, cabinets are composed into the LED display with different sizes needed by customer.





Front of module

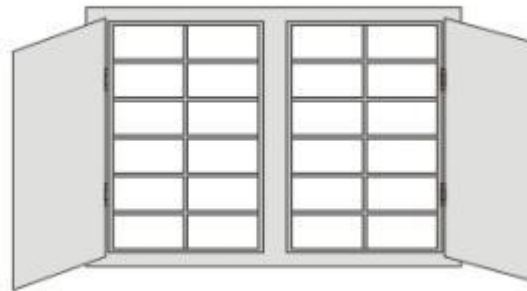


Back of module

Front&Side of module

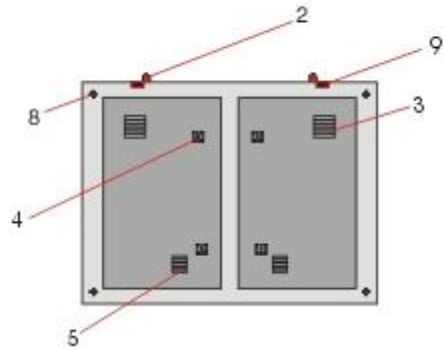
Back &Side of module

2. Cabinets are the basis of LED display with different sizes which needed by customer

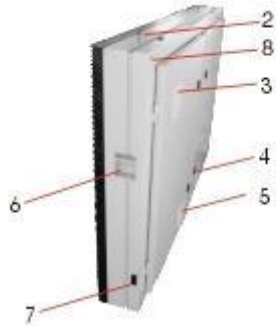


Cabinet frame

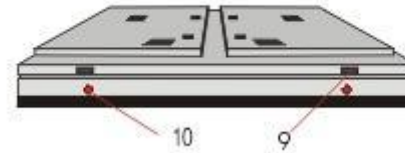
Front view of cabinets



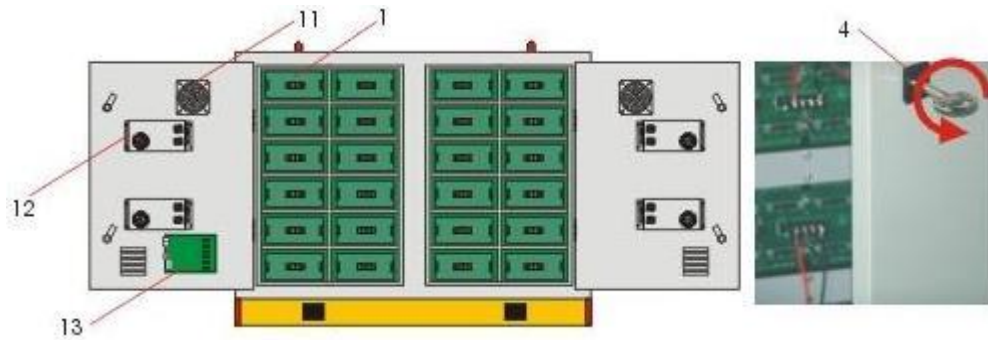
Back view of cabinet



Side view of cabinet



Bottom view of cabinet

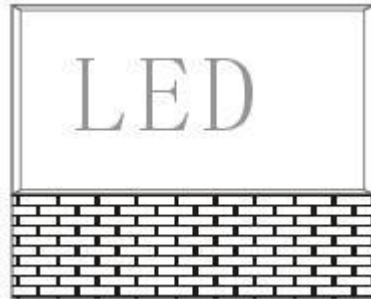


- 1. Module
- 2. Fixed Axes for Cabinet connection
- 3. Fan Vent
- 4. Lock of Cabinet
- 5. Air Entrance
- 6. Handle
- 7. Input hole for Power and Net Line
- 8. Fixed Hole of Cabinet
- 9. Netline Input Hole
- 10. Locating hole for Cabinet
- 11. Fan
- 12. Power Supply
- 13. Receiving Card

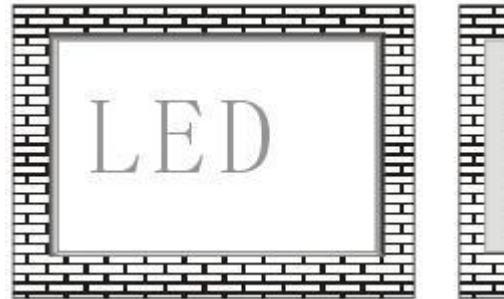
Above is cabinet structure of our LED display, which is our hot-selling product of outdoor full color LED display . Other outdoor full color LED display have similar structure.

Installation Instruction

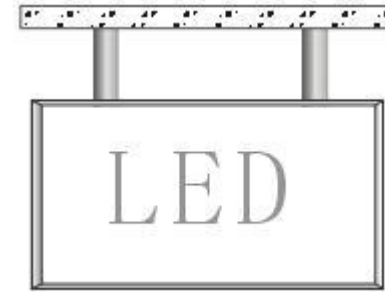
1. Common Installation type



(A) Base Type



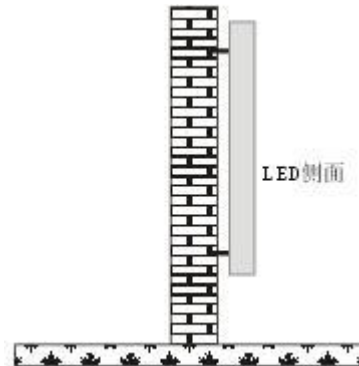
(B) Inlaid Type



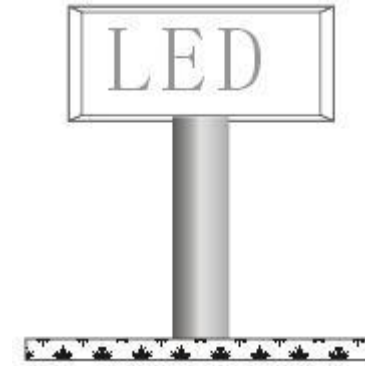
(C) Hang Type



(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 intensity, 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

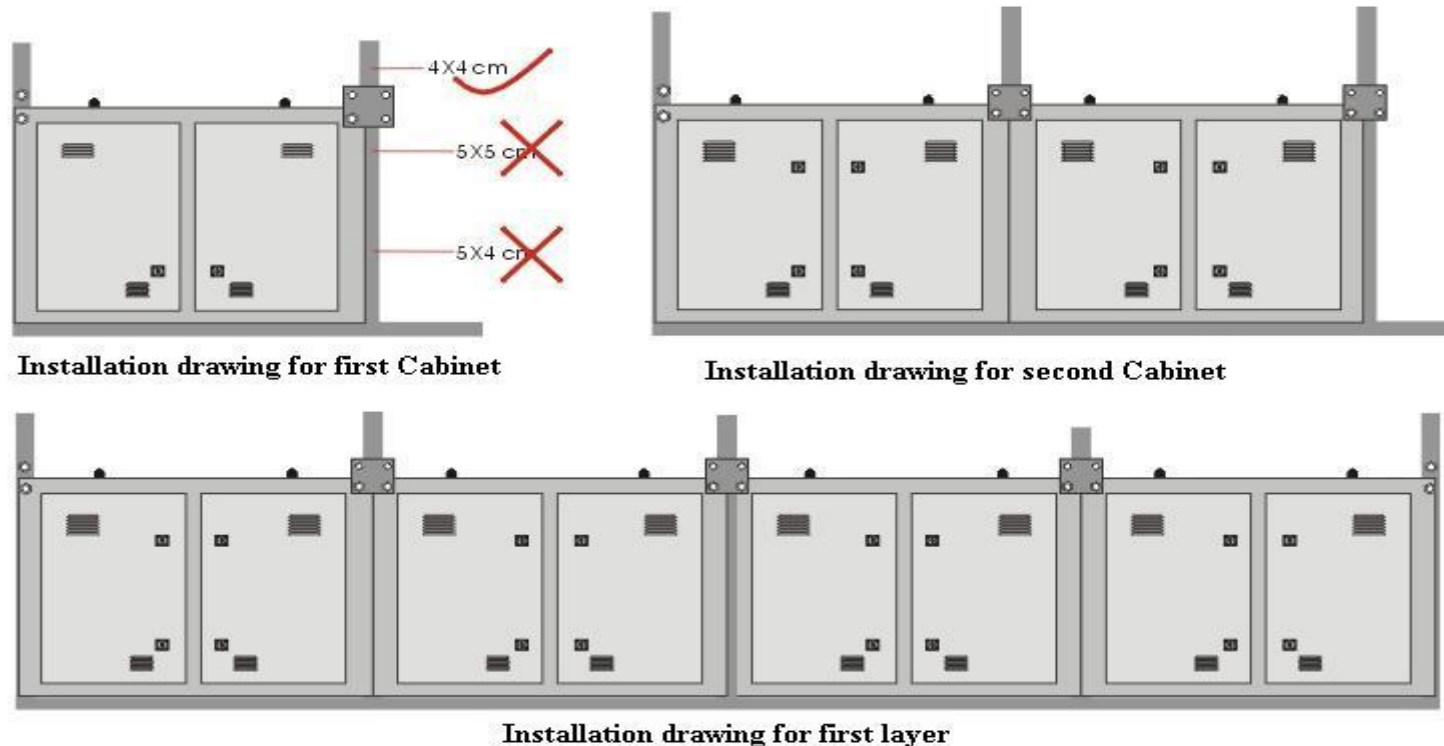


Maintenance Passage Sketch

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.

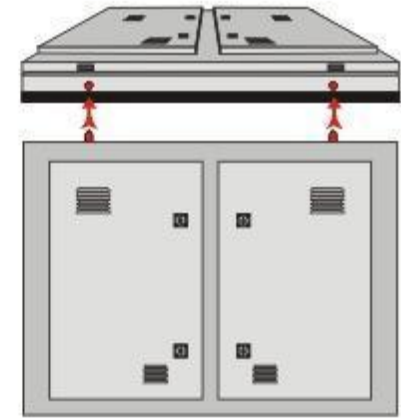
Make sure that the bottom layer of cabinets should be very flat, and then install the upper layer cabinets. Put water-proof glue onto the joint between two cabinets. After the whole LED display finish debugging, the LED display framework around should do strict water proof treatment.

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





Second Layer Installation Drawing



Up and Down Installation Drawing

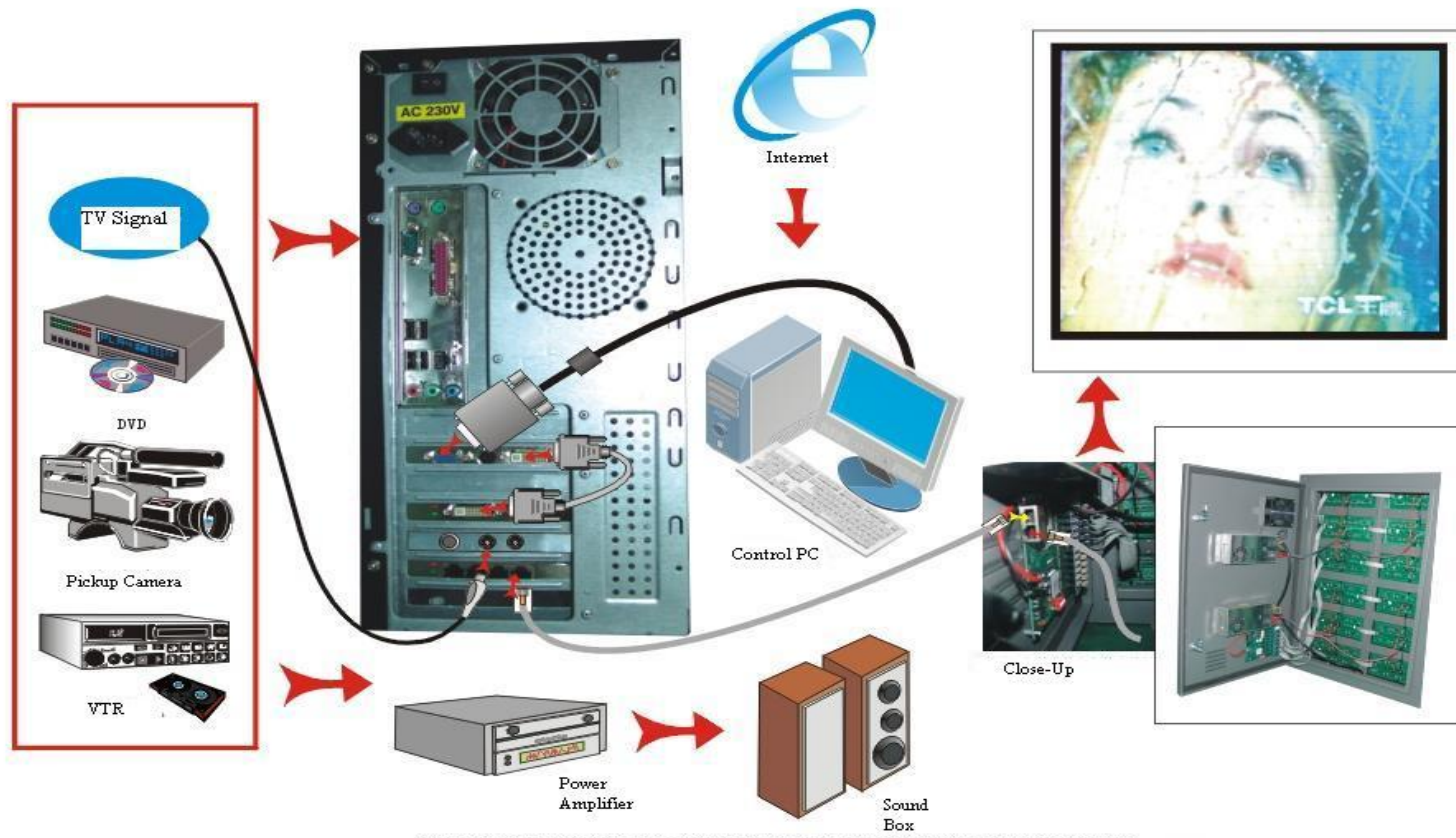
Software Installation

Basic Configuration requirement for computer:

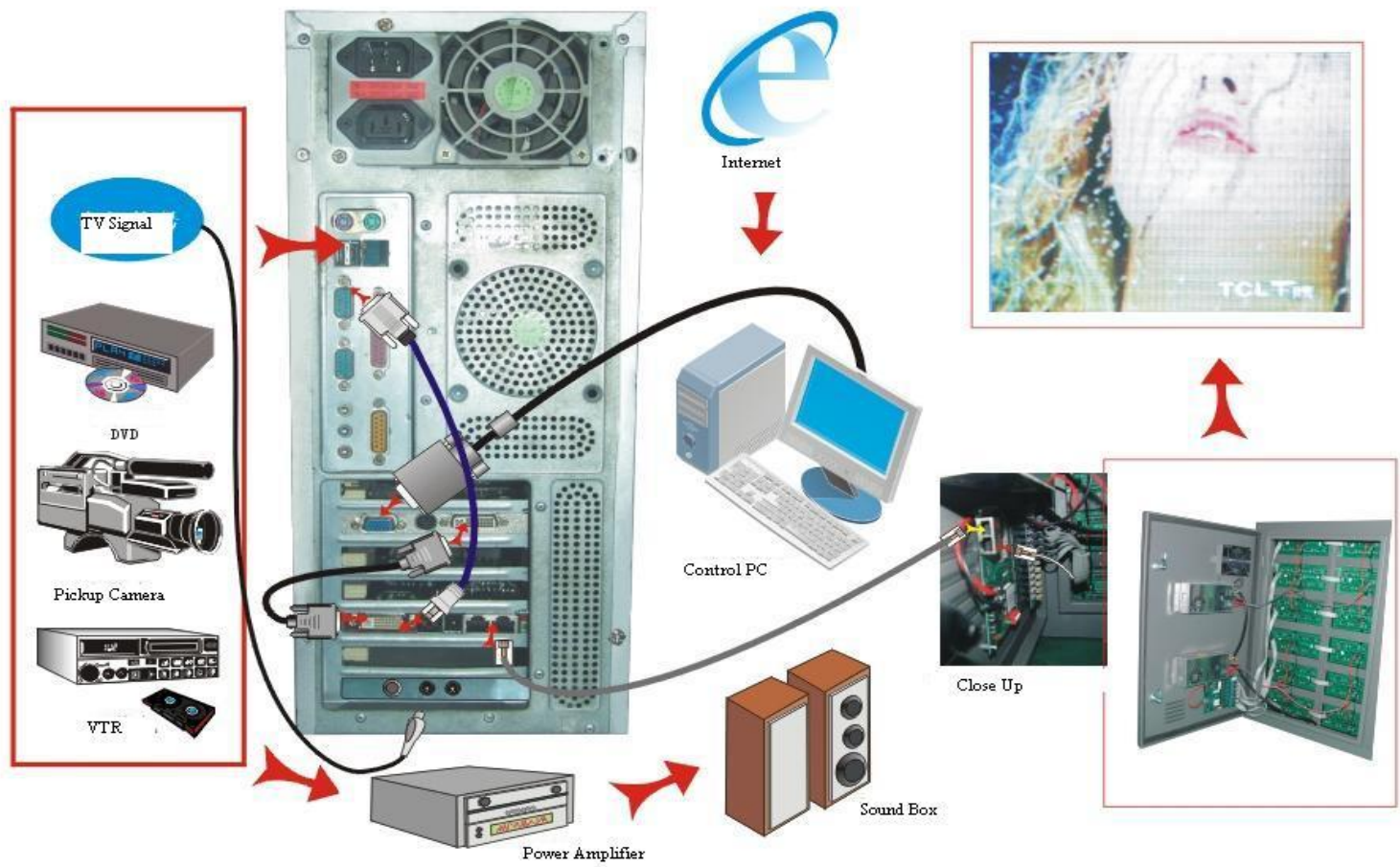
Operating system :Windows98/me/2000/NT/XP

Hardware system : CPU Pentium 300Mhz or above

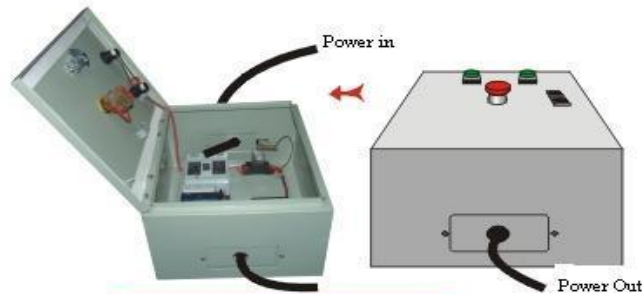
EMS memory: 64M



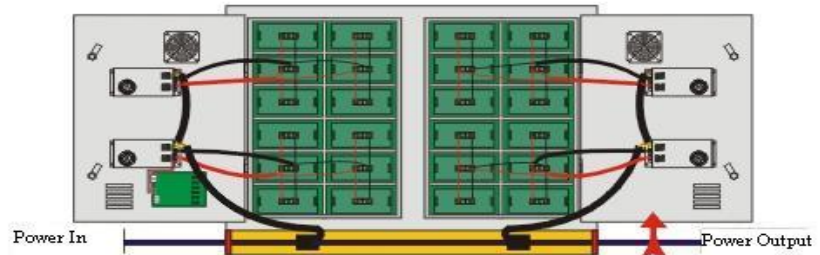
PC port input and Net line connection to LED display(System 1 net line connection diagram)



PC port input and Net line connection to LED display(System 2 net line connection diagram)



Electricity Box

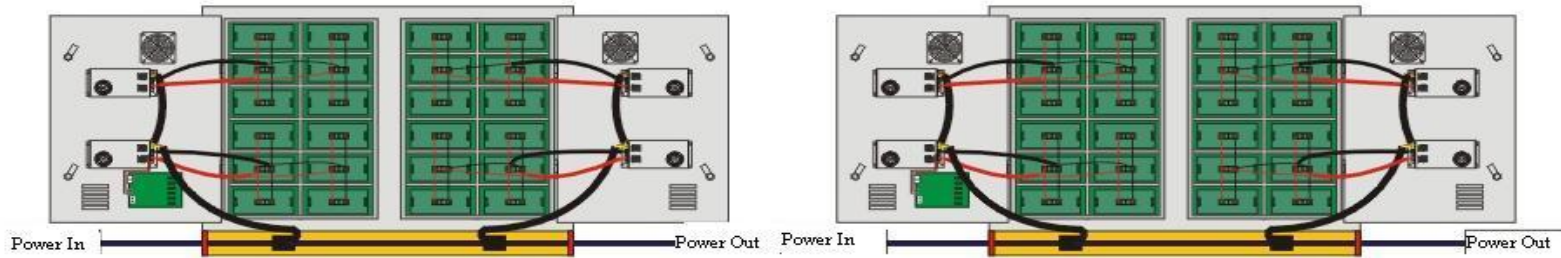


Power line connection inside cabinet



Power supply from AC to DC current

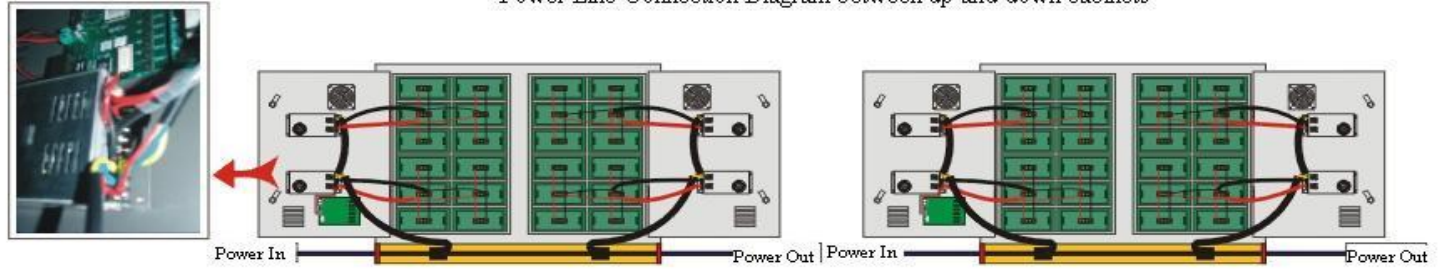
Power Line Connection Inside Single Cabinet



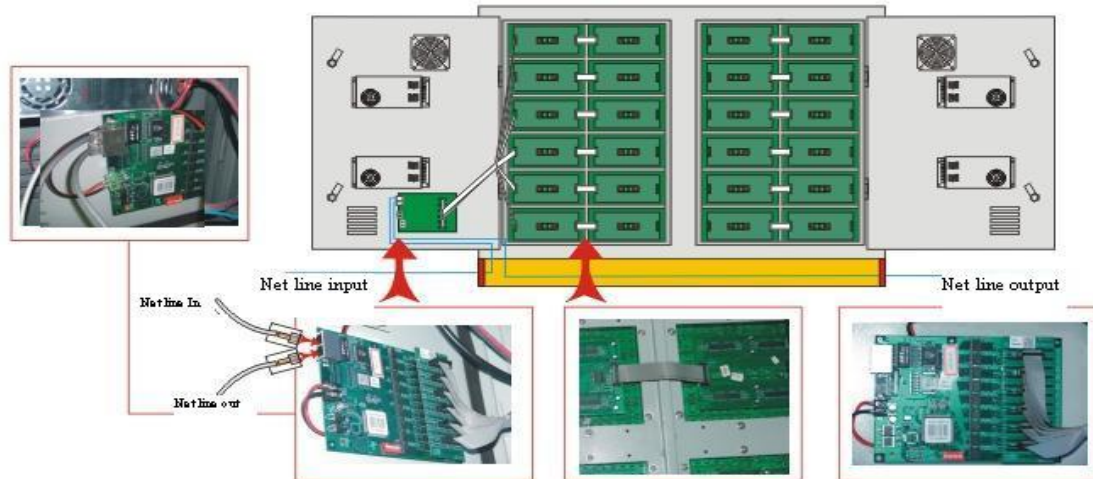
Power Line Connection Diagram for Same Row Cabinet



Power Line Connection Diagram between up and down cabinets



Power Line Connection Diagram between Same Row Cabinets

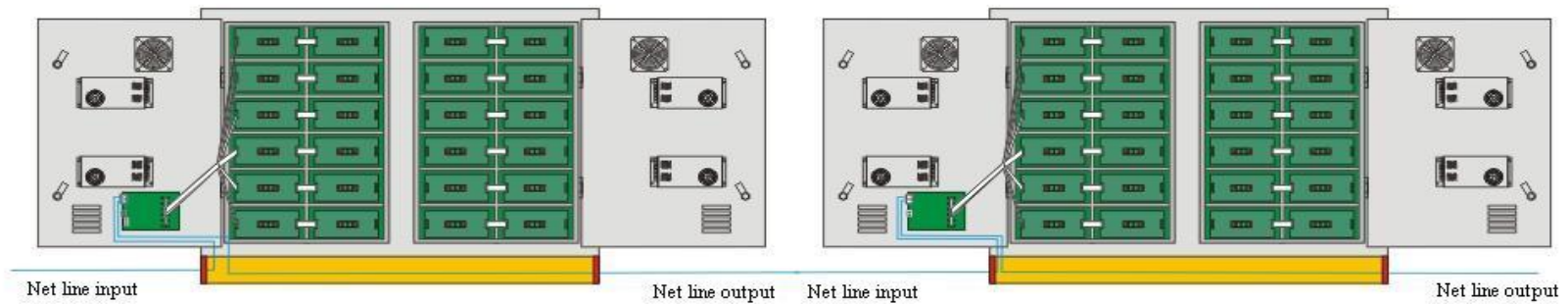


Net line input and output connection close-up

Flat drop-out line close-up

Long drop-out line close-up

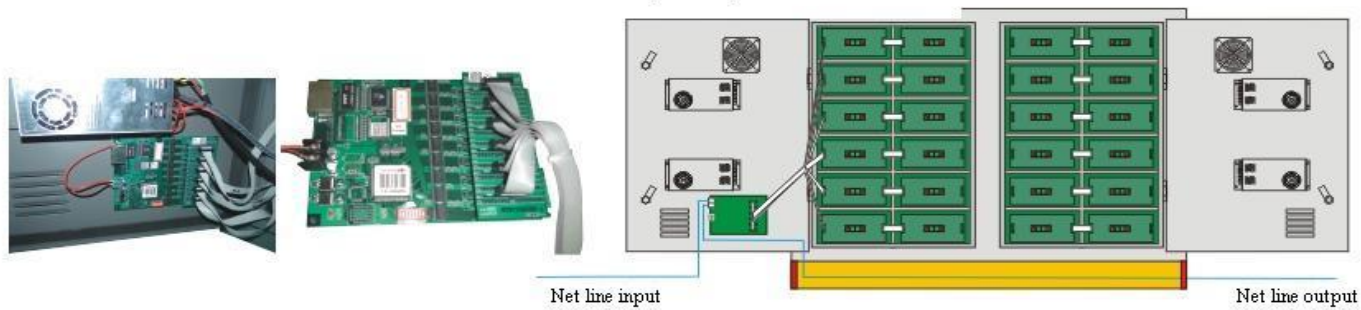
Net line input and output connection diagram for single cabinet



Net line input and output connection diagram for same row cabinets



Net line connection diagram for up and down cabinets



Netline input and output connection diagram between up and down cabinets

Problems and solutions

Phenomena	Reason	Solutions
Indicate lights of part of the driving board are not lighting	<ol style="list-style-type: none"> 1) No electrical supply(220V) 2) Not proper touching of circuit 	<ol style="list-style-type: none"> 1) Test the power supply if have electricity or not 2) Check the switch and power supply line 3) Power supply damaged or not
No picture displayed for screen, the green light of the sending card glint, the green light of the receiving card do not glint	<ol style="list-style-type: none"> 1) (RJ45) head of net line not plug well 2) Something wrong with output and input port of the data 3) Receiving card without electricity supply 4) Something wrong with the receiving card and sending card damaged 	<ol style="list-style-type: none"> 1) Re-insert(RJ45) head 2) Validate the port of the output and input 3) Check receiving card with power supply of 5V 4) Delivered to professional staff to check and repair
No pictures displayed for screen, the green light of the sending card do not glint	<ol style="list-style-type: none"> 1) DVI line not connected well 2) The setup of the display attributes are not right 3) Something wrong with the sending card 	<ol style="list-style-type: none"> 1) Check the DVI connection head 2) Re-setup again. 3) Delivered to professional staff to check and repair
“No big screen system found” appeared when the PC launched	<ol style="list-style-type: none"> 1) Serial port and big screen system not connected 2) Sending card Damaged 3) COM of the PC Damaged 	Validate, re-connecting
The long bar equal to the height of 1 module do not display	<ol style="list-style-type: none"> 1) Flat line disconnected or connect not well 2) Something wrong with input or output of front module or next module 	<ol style="list-style-type: none"> 1) Re-insert or change 2) Check, dredge
4~5 cell boards do not display	1) Power supply protected or damaged	Test, change

	2) The AC power line not connected well	
The whole cabinet no display	1) 220V power supply line not connected 2) RJ45 head of netline not plugged 3) Receiving card damaged	1) Check the power line 2) Plug the RJ45 head of netline well 3) Change the receiving card
Whole screen disorder or has distorted pictures	1) Something wrong with LED Para program or do not run 2) The net line sequence not right 3) The signal of the transmission is too weak	1) Operating again 2) Tidy the order of the net line 3) Shorten the distance of transmission