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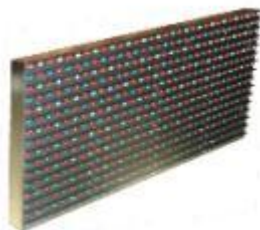
14. Do not change easily the fixed technical parameter setup by manufacturer. If the parameter is not set correctly, the display quality of screen will be affected much.

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.
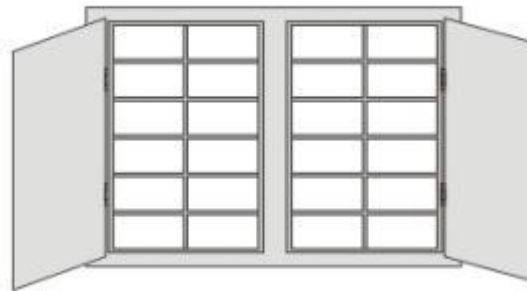
Front of module　　　　**Front&Side of module**　　　　**Back of module**　　　　**Back &Side of module**
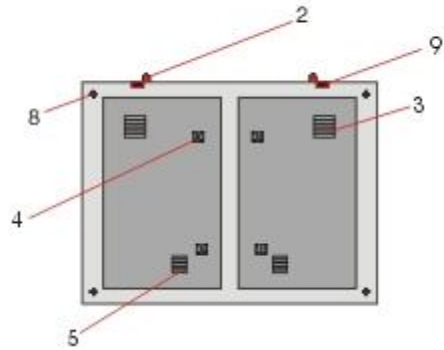
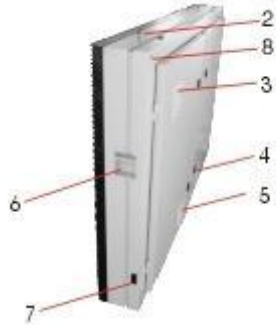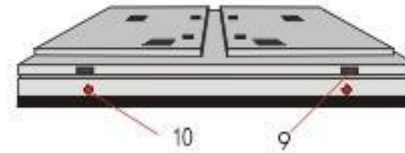**2. Cabinets are the basis of LED display with different sizes which needed by customer**

Cabinet　frame　　　　　　　　　　**Front　view　of　cabinets**
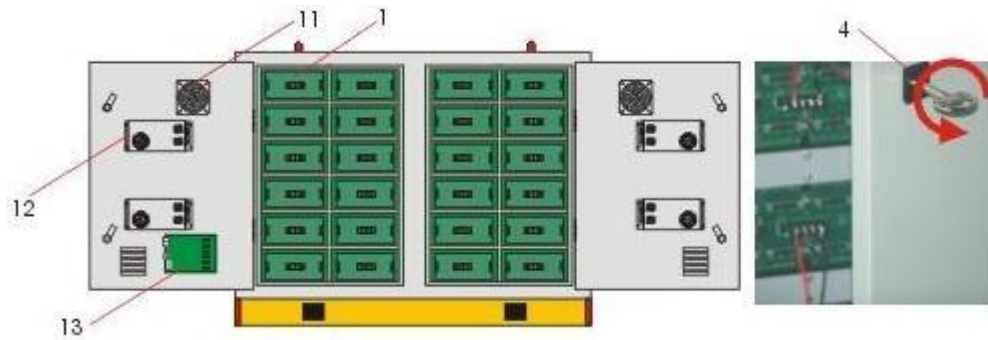
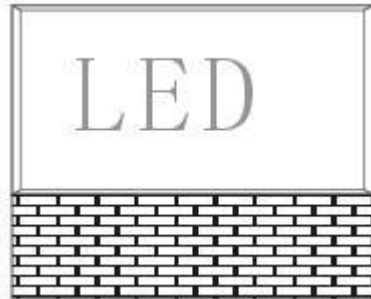**Back view of cabinet**   **Side view of cabinet**   **Bottom view of cabinet**

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
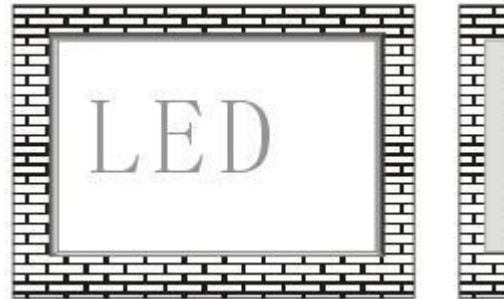12. Power Supply
13. Receiving Card

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.

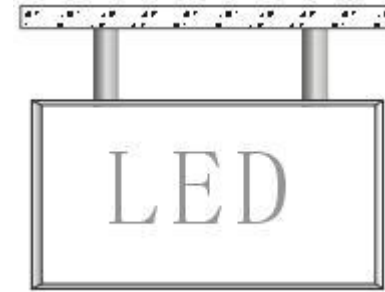# Installation Instruction

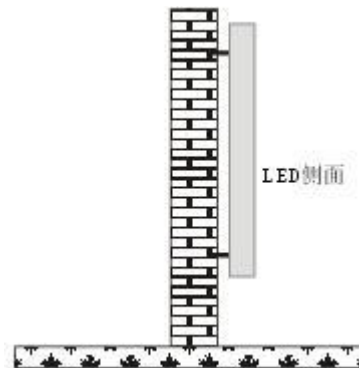## 1. Common Installation type

(A) Base Type
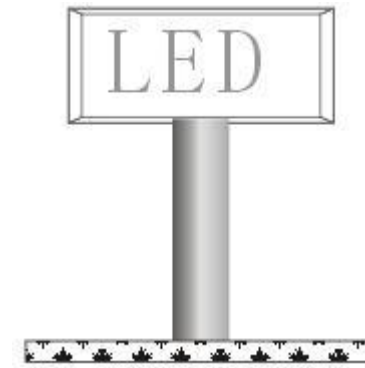
(B) Inlaid Type

(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 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
3. louver Cover

2. Connecting Plate
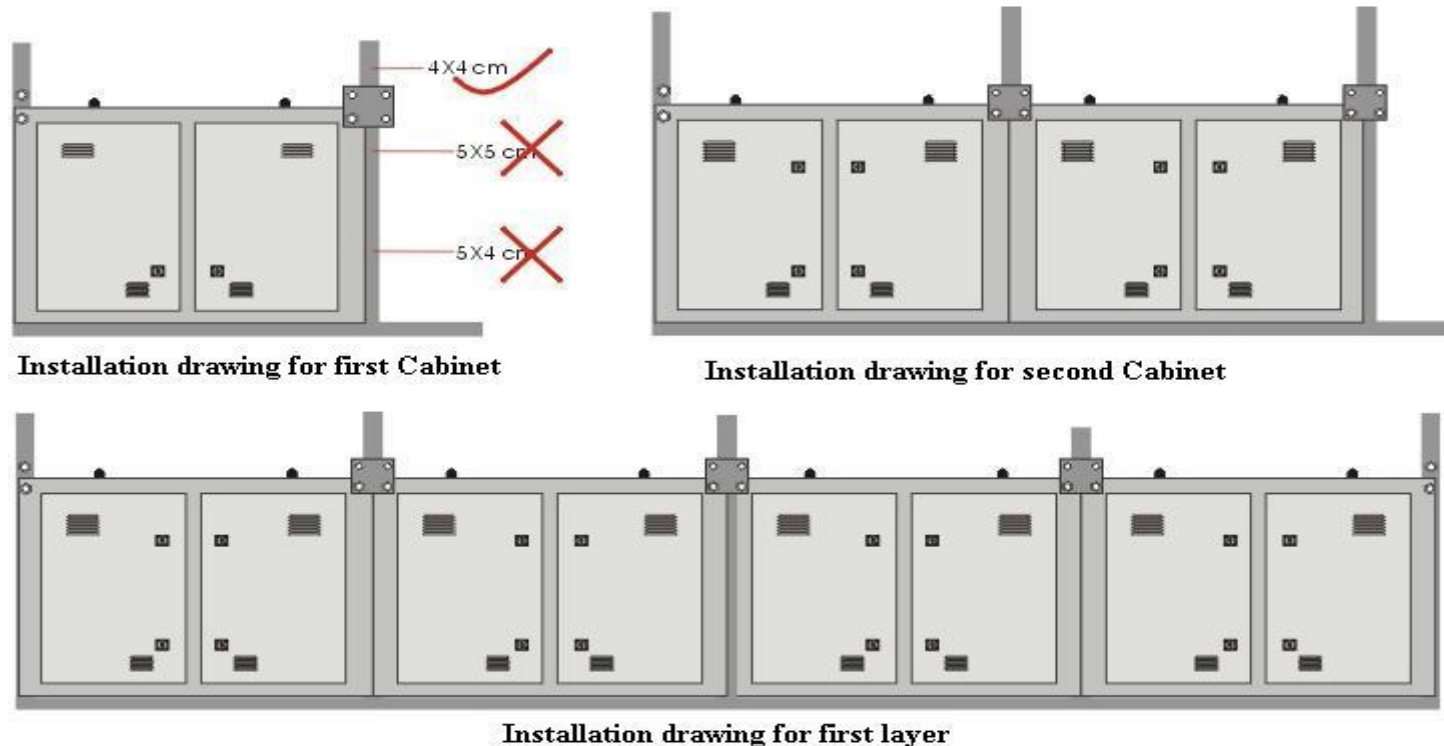4. Movable maintenance ladder

60cm--100cm

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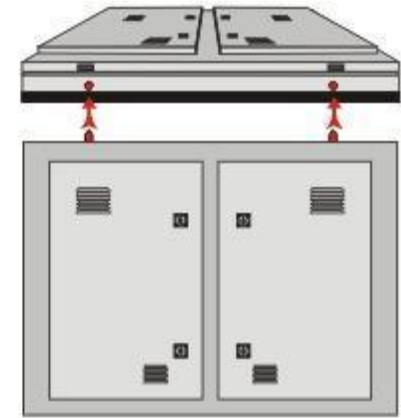
Make sure that the bottom layer of cabinets should be very flat, and then install the upper layer cabinets. Put water-proof glue onto the joint between two cabinets. After the whole LED display finish debugging, the LED display framework around should do strict water proof treatment.

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

4X4 cm

5X5 cm

5X4 cm

Installation drawing for first Cabinet

Installation drawing for second Cabinet

Installation drawing for first layer

Second Layer Installation Drawing
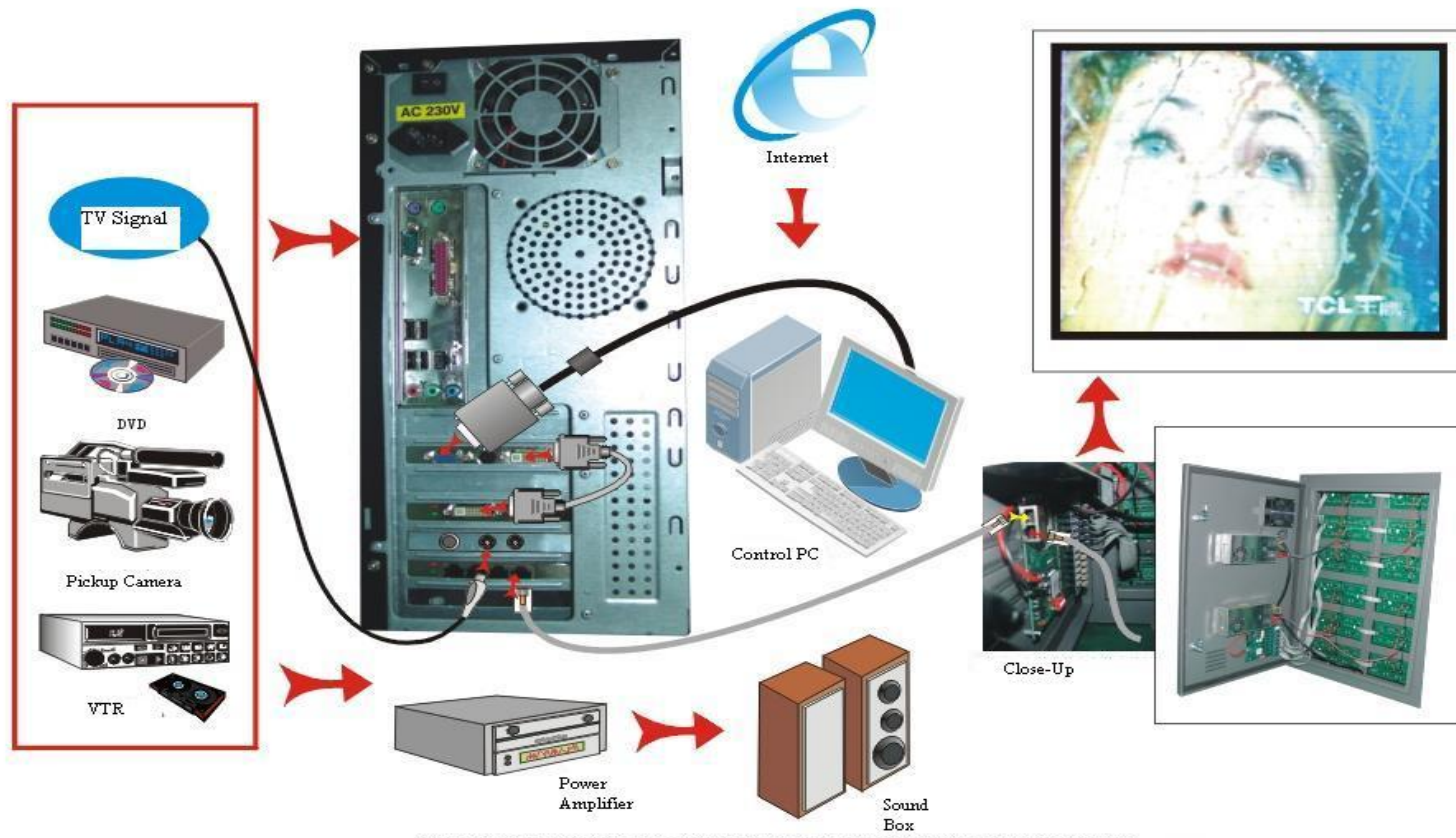
Up and Down Installation Drawing

Software Installation
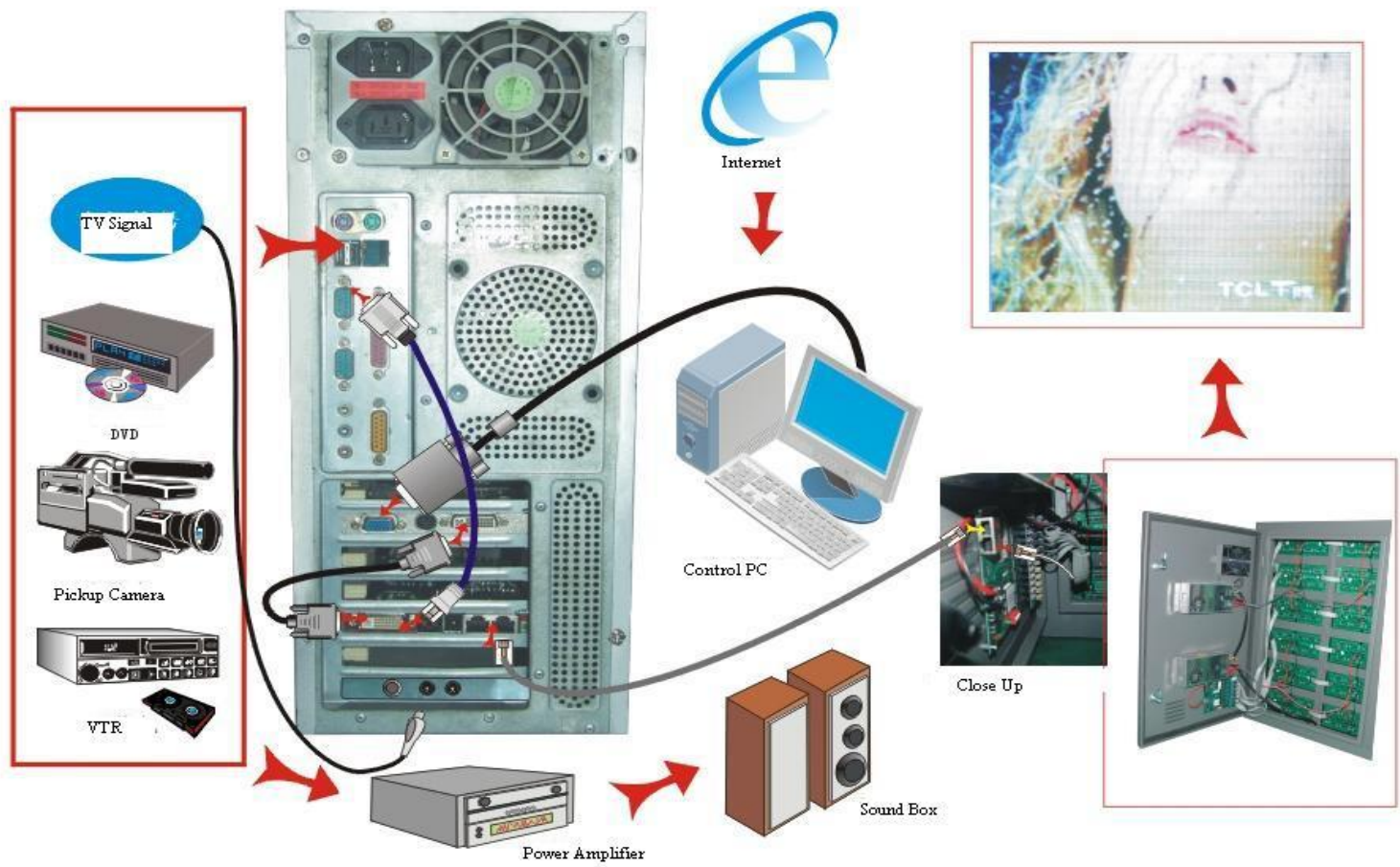
Basic Configuration requirement for computer:
Operating system :Windows98/me/2000/NT/XP
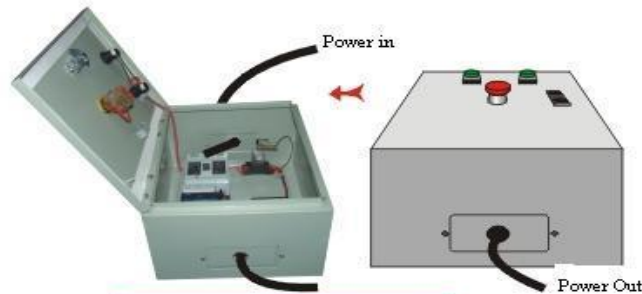**Hardware system : CPU Pentium 300Mhz or above**
EMS memory: 64M

TV Signal

DVD

Pickup Camera

VTR

AC 230V

Internet

Control PC

Close-Up

Power Amplifier

Sound Box

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

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TV Signal

DVD

Pickup Camera

VTR

Internet

Control PC

Close Up

Power Amplifier

Sound Box

TCLT

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

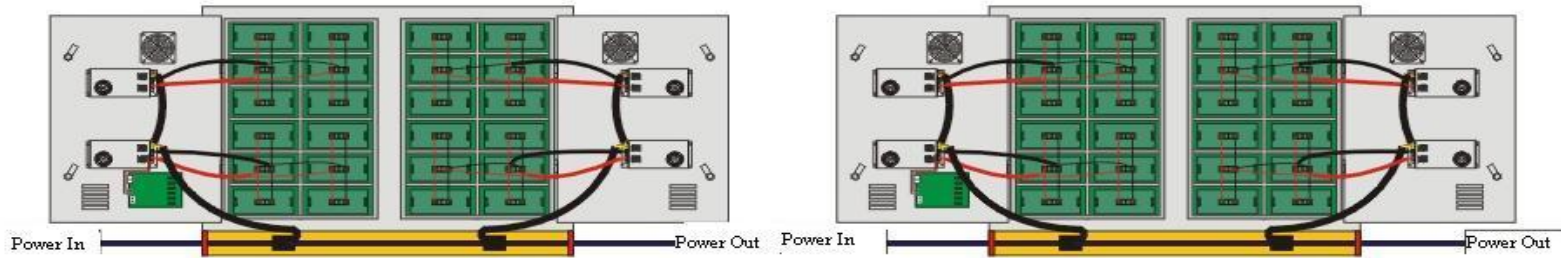Power in

Power Out

Power Out

Power In

Power Output

Electricity Box

Power line connection inside cabinet

Power supply from AC to DC current

Power Line Connection Inside Single Cabinet

Power In

Power Out

Power In
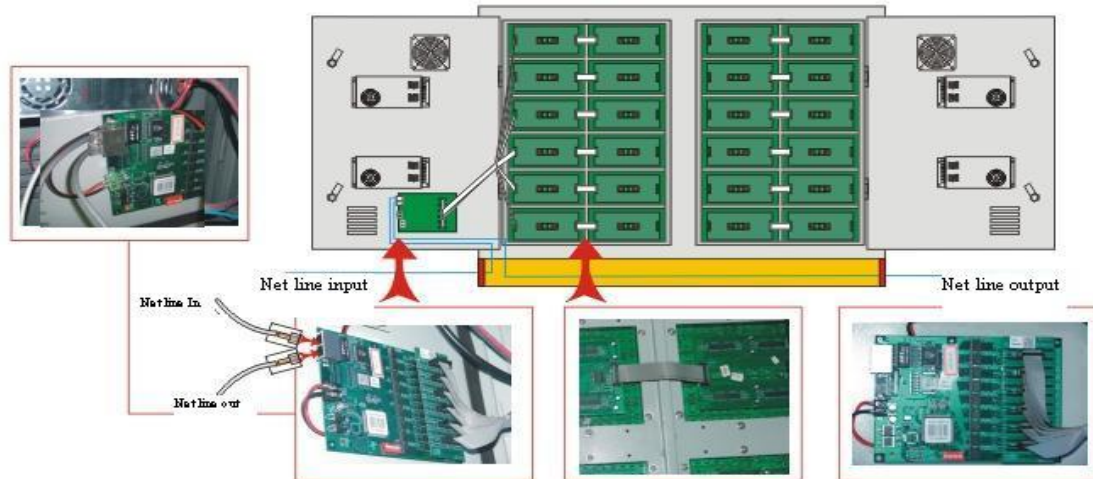
Power Out

Power Line Connection Diagram for Same Row Cabinet

Electricity
Box

Power Line Connection Diagram between up and down cabinets

Power In | Power Out | Power In | Power Out

Power Line Connection Diagram between Same Row Cabinets

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Net line input

Net line output
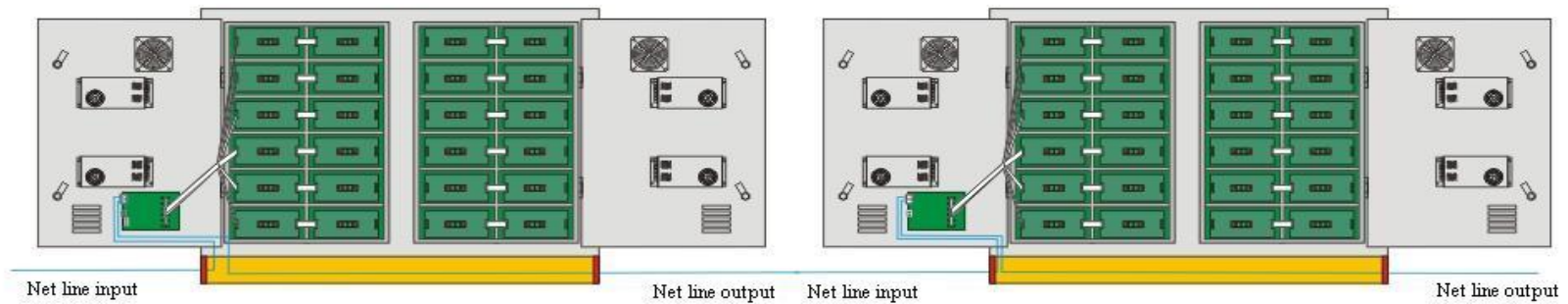
Net line In

Net line out

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

Net line output

Net line input

Net line output

Net line input and output connection diagram for same row cabinets

Net line signal

Net line connection diagram for up and down cabinets

Net line input

Net line output

Netline input and output connection diagram between up and down cabinets

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Problems and solutions

Phenomena	Reason	Solutions
Indicate lights of part of the driving board are not lighting	1) No electrical supply(220V) 2) Not proper touching of circuit	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	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	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	1) DVI line not connected well 2) The setup of the display attributes are not right 3) Something wrong with the sending card	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	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	1) Flat line disconnected or connect not well 2) Something wrong with input or output of front module or next module	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 pluged 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