Outdoor vertical floor standing with air-cooled digital signage user manual

1、 Safety Precautions for Outdoor digital signage

2、 Outdoor digital signage opening door operation and precautions

3、 Outdoor digital signage Installation Instructions

4、 Outdoor digital signage's Instructions for Powering On the Device

5、 Outdoor digital signage Introduction to Components

6、 Outdoor digital signage's daily maintenance instructions

7、 Outdoor digital signage's Temperature Control Board Operation Instructions

1、Safety Precautions for Outdoor digital signage

1. As outdoor digital signage equipment (hereinafter referred to as equipment) is mostly used in public places, unstable voltage may cause damage to the equipment. It is recommended to use stable mains power supply and avoid sharing the power supply with high-power equipment such as elevator power supply. In places where the voltage is frequently unstable, it is necessary to use corresponding voltage stabilizers for stable power supply. Otherwise, the equipment may work unstably or even be damaged.

2.To prevent damage during installation, the equipment must be securely installed on the ground or fixed bracket according to the installation method in the manual. The internal electrical components and circuits of the equipment shall not be disassembled or modified without the manufacturer's permission to avoid high-voltage electric shock or other dangers. If adjustments to the internal circuits are necessary, be sure to contact the manufacturer and operate under their guidance. Otherwise, the manufacturer will not be responsible for any damage to the equipment components caused by this.

3.The equipment protection level is IP65, which is waterproof, dus-tproof, theft-proof, and explosion-proof, fully meeting the requirements for outdoor use in normal conditions. Do not immerse the equipment in water to avoid damage.

4. If the device is not in use for a long time, please turn off the power of the device.

5.Before cleaning the screen of the device, please unplug the power cord first to ensure the device is powered off. Use a clean, soft, lint-free cloth to gently wipe the screen, and do not directly use spray on the screen.

6.Before inserting or removing the SD/TF card, please read the instructions carefully. If the SD/TF card cannot be inserted, check if it is inserted incorrectly. Do not force it in or out to avoid damaging the SD/TF card slot.

7. Do not block the ventilation holes or speaker holes on the device shell, and do not install the device near radiators or heat sources to prevent the internal temperature of the device from becoming too high and causing poor heat dissipation.

8. During the use of the equipment, do not touch the internal electrical components directly with your hands to avoid injury to yourself.

2、Outdoor digital signage opening door operation and precautions

After inserting the key into the keyhole of the lever lock, rotate it to the right to open the door. Do not rotate it in the opposite direction, as it may damage the lever lock and prevent the device from being opened!

**Please see the picture in the below:**

3、 Outdoor digital signage Installation Instructions

1、 Precautions before installation：

The device is installed in a floor-standing manner. To ensure safety, the ground must be a sturdy platform, and it is recommended to customize a cement platform. When selecting the installation location, sufficient space around the equipment must be considered to facilitate heat dissipation. The installation location should be as clean as possible, as an excessive amount of dust in the environment can affect the service life of the equipment. The diagram below shows the dimensions of the equipment. There should be no obstacles around that would affect the normal operation of the equipment, especially pay attention to whether there are obstacles that would affect the opening and closing of the equipment doors.
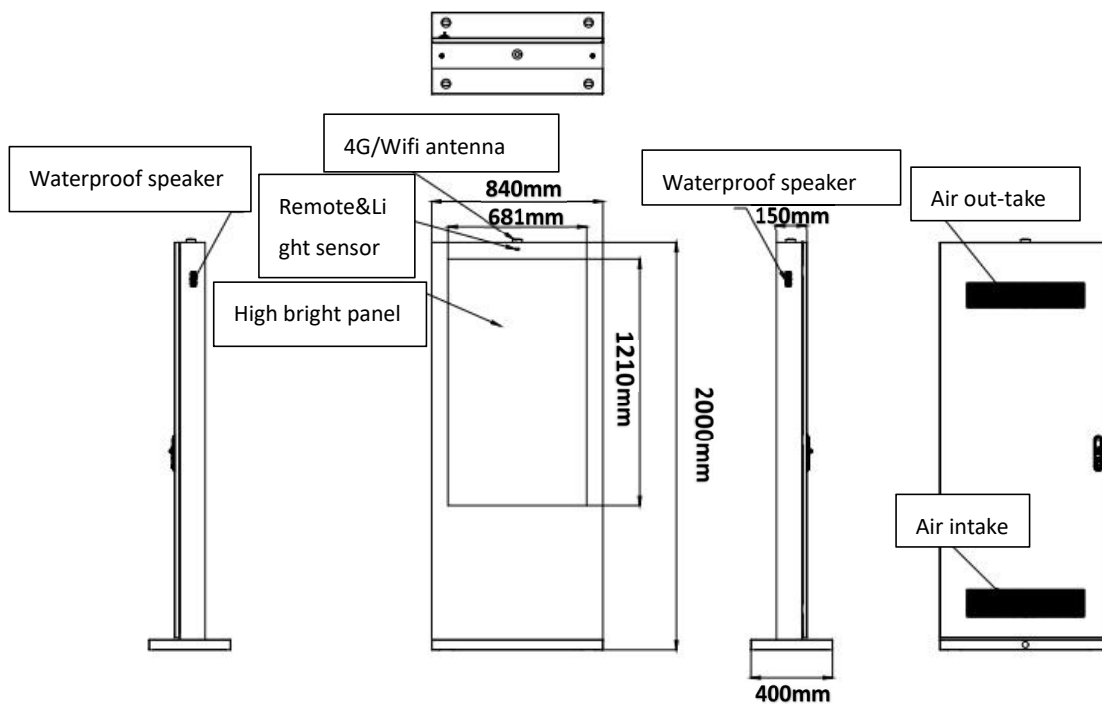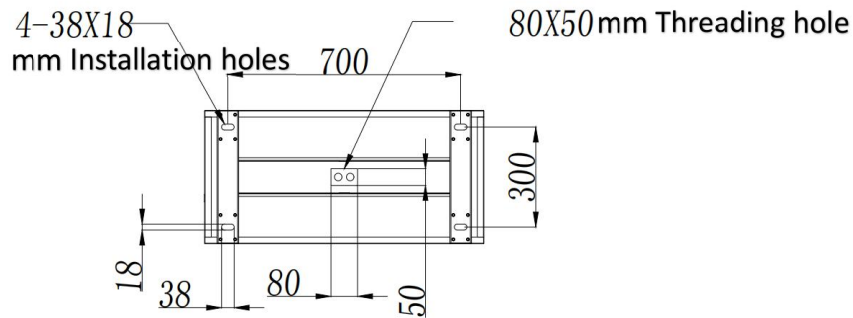
2.Construction requirements

Device installation should be carried out on sunny days to avoid installation during thunderstorms, in order to prevent water ingress or damage from lightning strikes to internal electrical components of the device.

3.Installation Preparation Tools

Name of tool	Purpose Description	Picture
Tape measure	Measure the length	
Ruler	Measure the length	
Spirit level	Inspect the flatness of the countertop	
Impact drill	Device installation drilling	

Drill	Device installation drilling	
Rammer	Tighten the bolt	
Adjustable wrench	Elastic screw/nut	
Hex key	Elastic screw	
M12 socket	Elastic screw/nut	

4.Making cement platform

1. To make the ground cement base according to the diagram, the outer dimensions of the cement base must be larger than the product installation dimensions (i.e., the dimensions shown in the diagram, in mm). It is recommended that the thickness of the cement base be greater than 400mm and raised above the ground by at least 20mm. When making the cement base, be sure to leave holes for the lines. The cable should be buried under the cement base, with at least 2 meters of cable left outside.
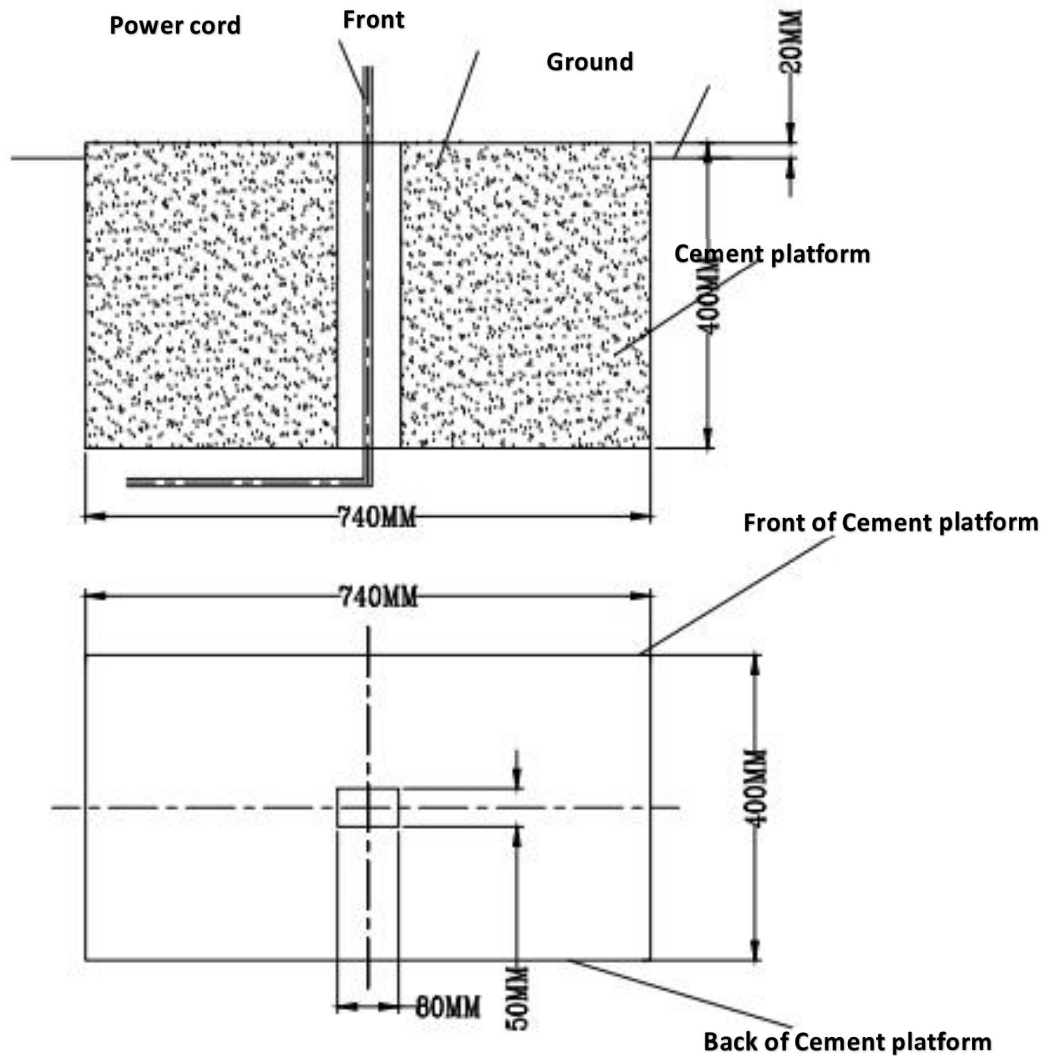
5. Punching

After waiting for the cement platform to solidify, use an impact drill with an M16 drill bit to drill 4 holes on the platform as shown in the diagram.

Impact drill

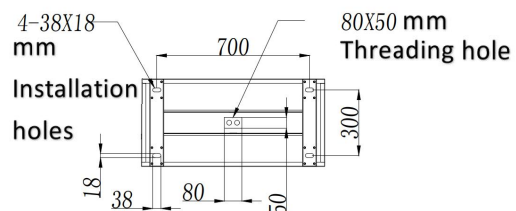## 6. Install the equipment

1. Use M12 bolts to secure the equipment to the concrete base.
2. Use a horn hammer to drive the expansion bolt into the installation hole.

3. Use a socket wrench to tighten the tension bolt.

4. Finally, cover the 4 installation holes with plugs to complete the installation.

After the equipment is installed, please clean the dust inside the machine in time to prevent it from sticking to the LCD glass during use, affecting the use of the equipment. Too much dust will block the air vent, leading to poor heat dissipation and damage to the equipment.

M12 bolts
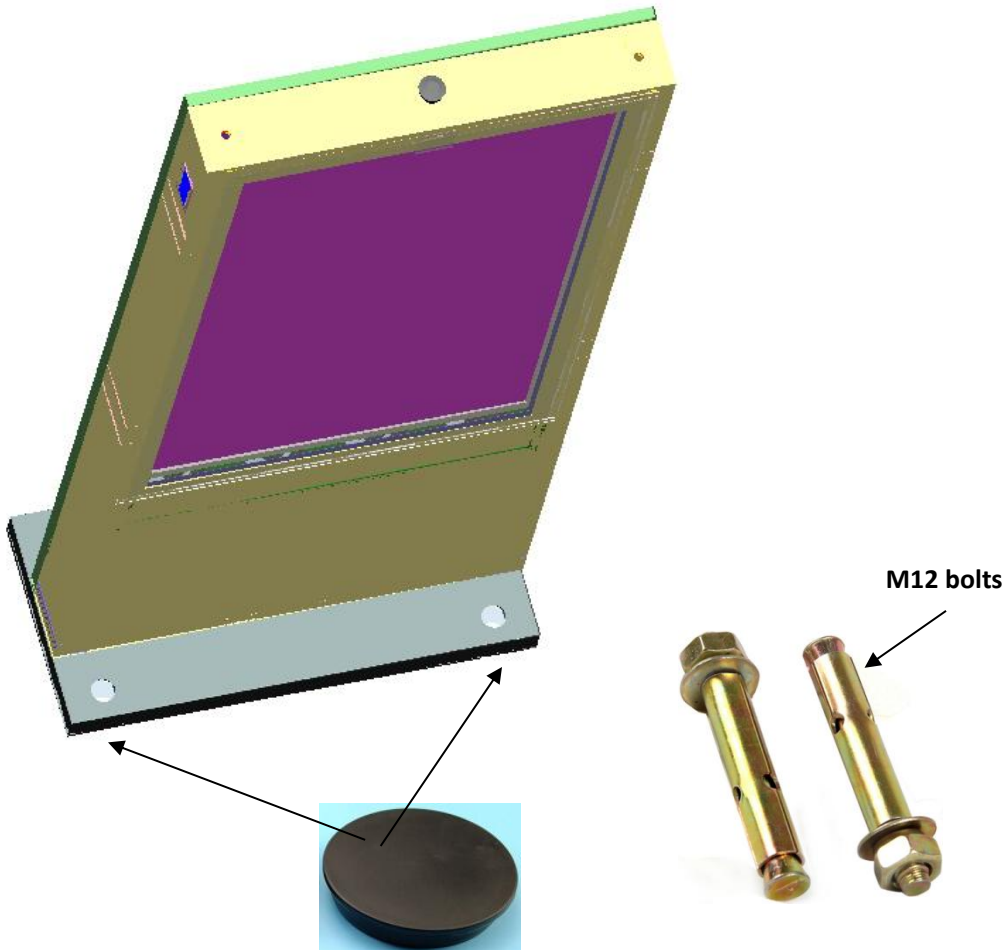
PE-ground wire

4、Outdoor digital signage's Instructions for Powering On the Device

As shown in the diagram, after connecting the power line N-neutral line L-live wire PE-ground wire in order, confirm the supply voltage. Common voltages include 110V/220V. Please make sure to connect the power line according to the markings. If connected incorrectly, the equipment will be damaged and cannot be used. After connecting, turn on the leakage protection switch to power on the device for normal operation (as shown in the diagram).
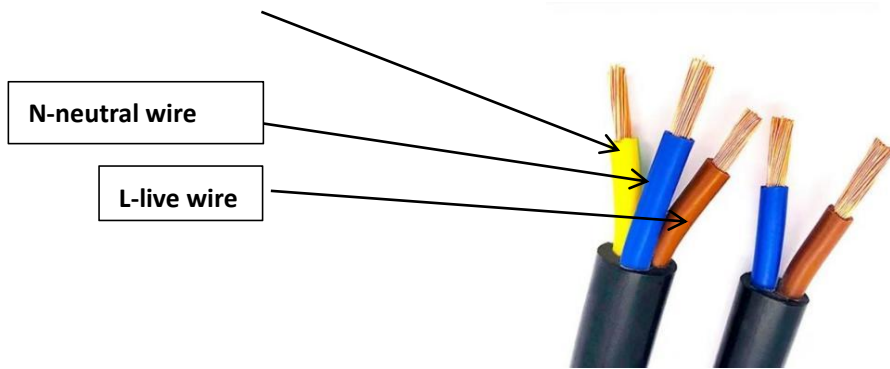
N-neutral wire

L-live wire

5、Outdoor digital signage Introduction to Components

Waterproof speaker

4G/WIFI antenna

Surge protector

Residual Current Circuit Breaker

Microcomputer Timer Switch

Media box

Cooling fan

Air out-take

High bright panel

T-con board

Anti-theft lock

Temperature control board

Backlight of driver board

Filte

Cooling fan

Entry of the power cable

Bottom base
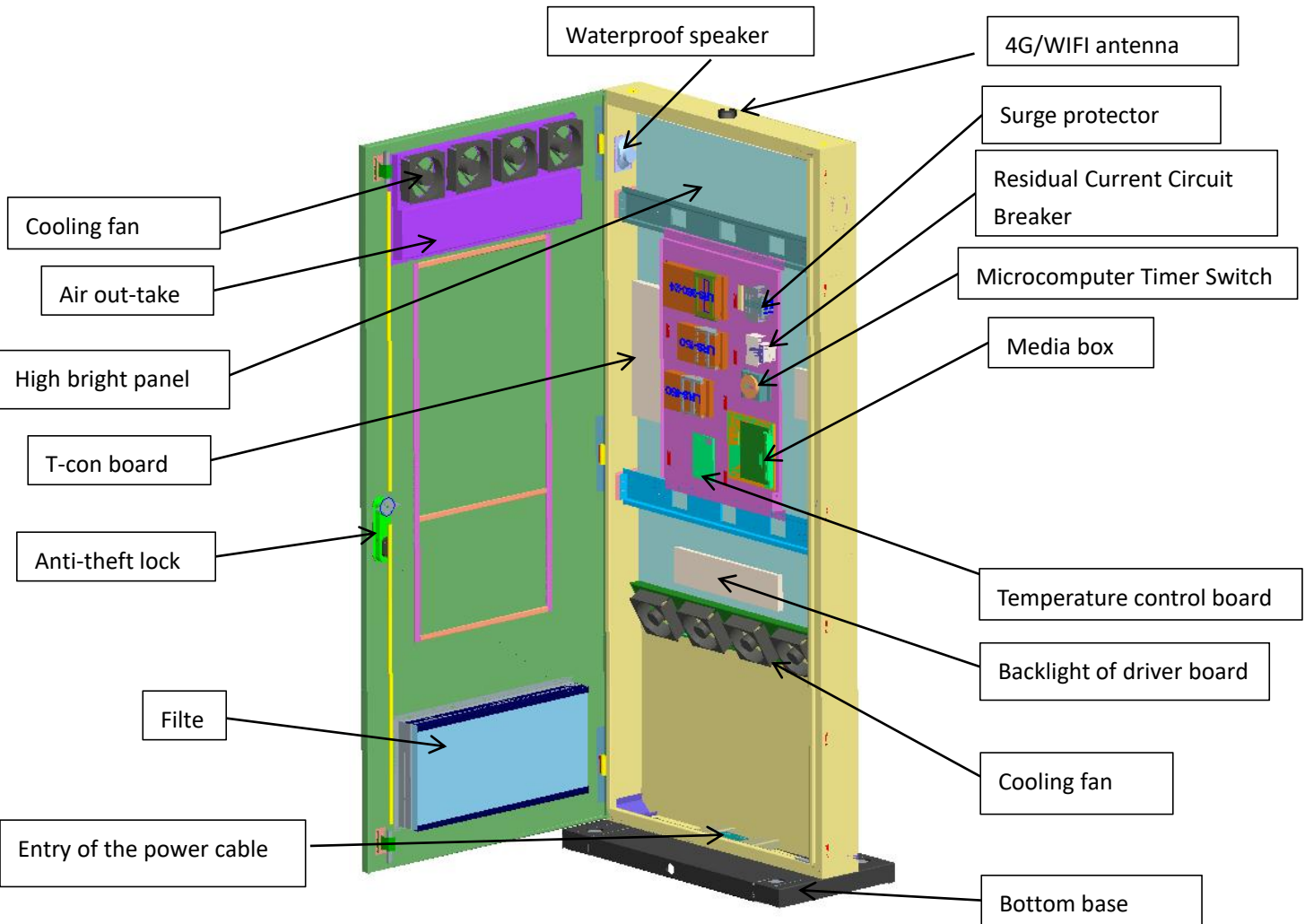
6、Outdoor digital signage's daily maintenance instructions

1.Filter replacement and cleaning

During the use of the device, the filter needs to be cleaned every three months. To clean the filter, remove it and use an air gun or cleaning tool to remove the dust. Loosen the fixing screws to remove the filter. If the buffer sponge is aging, please replace it in time.
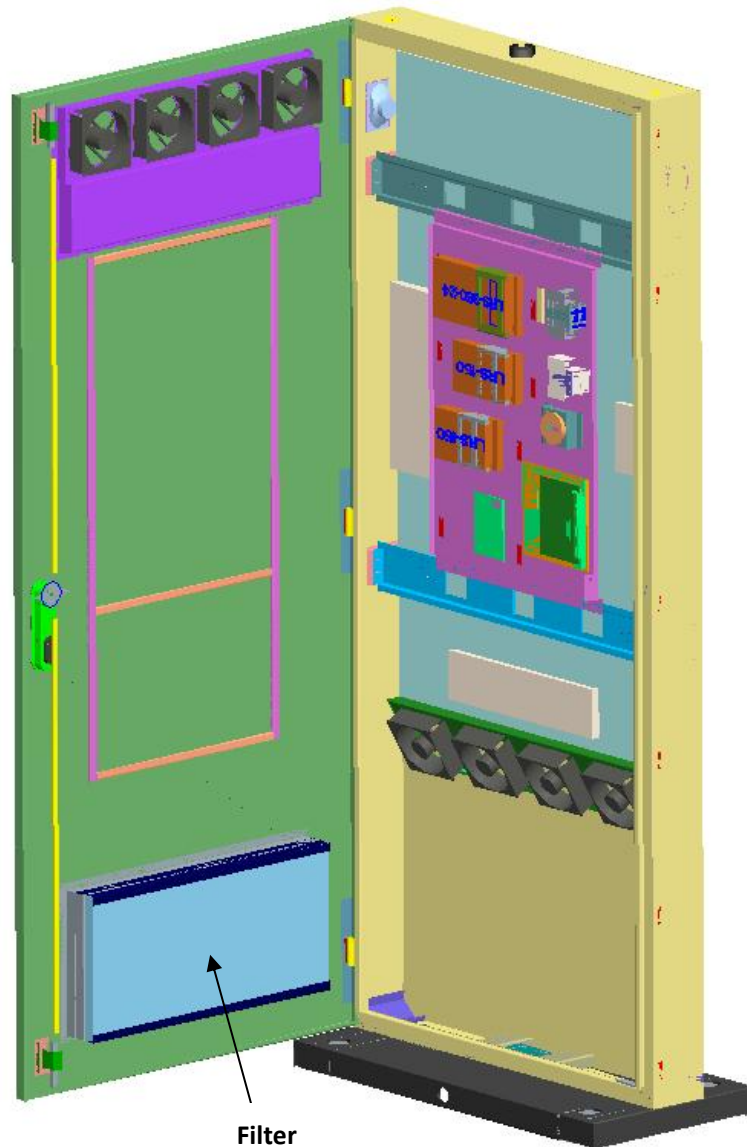
Filter

2.Replace the battery of the microcomputer timer switch

1.If the display panel shows incomplete or no numbers at all, as shown in Figure 1, the battery needs to be replaced.

2.Solution: As shown in Figure 2 and Figure 3, use a small flathead screwdriver to open the bottom buckle, remove the microcomputer timer switch, then open the back cover, replace the battery (type 5), and finally observe if the display panel shows normally, as shown in Figure 4.

3. If the display is abnormal, it indicates a malfunction in the microcomputer timer switch, and a new microcomputer timer switch needs to be replaced.

(The above operation must be done with power off!)

Picture 1

Picture 2

AA battery

Display normal
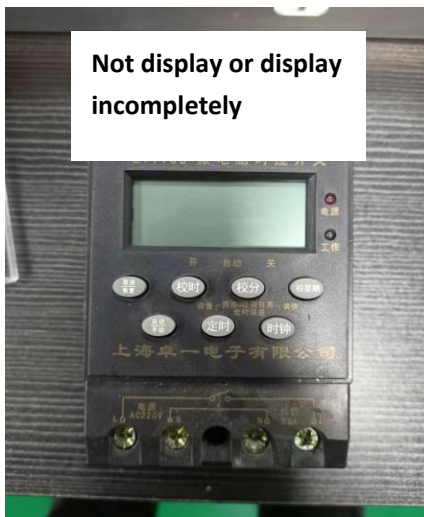
| Picture 3 | Picture 4 |

4. Small microcomputer timer switch fault elimination

The small microcomputer timer switch does not have an external battery, but uses a 1.2v nickel-metal hydride rechargeable battery, which is not removable internally. If you find that the LED display screen is incomplete or not displaying, press the reset button to eliminate the fault.
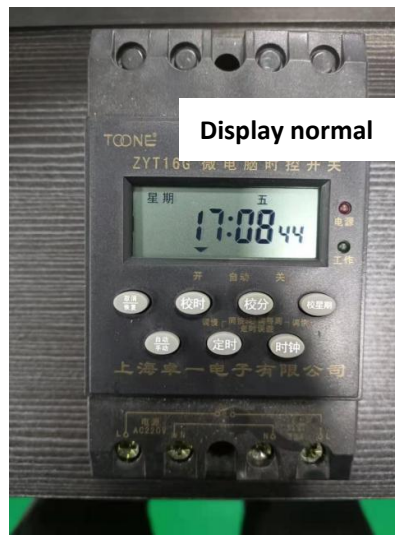

Reset button

7、Outdoor digital signage's Temperature Control Board Operation

1. Please strictly follow the operating requirements and important safety warnings in the instruction manual to use this product correctly. Otherwise, it may eventually lead to product failure; incorrect use can cause danger and may result in equipment damage or accelerated deterioration.The temperature control board collects the ambient temperature and humidity by connecting external temperature and humidity sensors, and controls loads such as fans, heaters, and displays accordingly. It also supports collecting data such as fan speed, access control, water immersion, and smoke for alarm prompts. It reserves an RS485 communication interface for communication with terminal devices. It has an onboard three-digit LED display for showing operational status and setting parameters.

2.Product photo
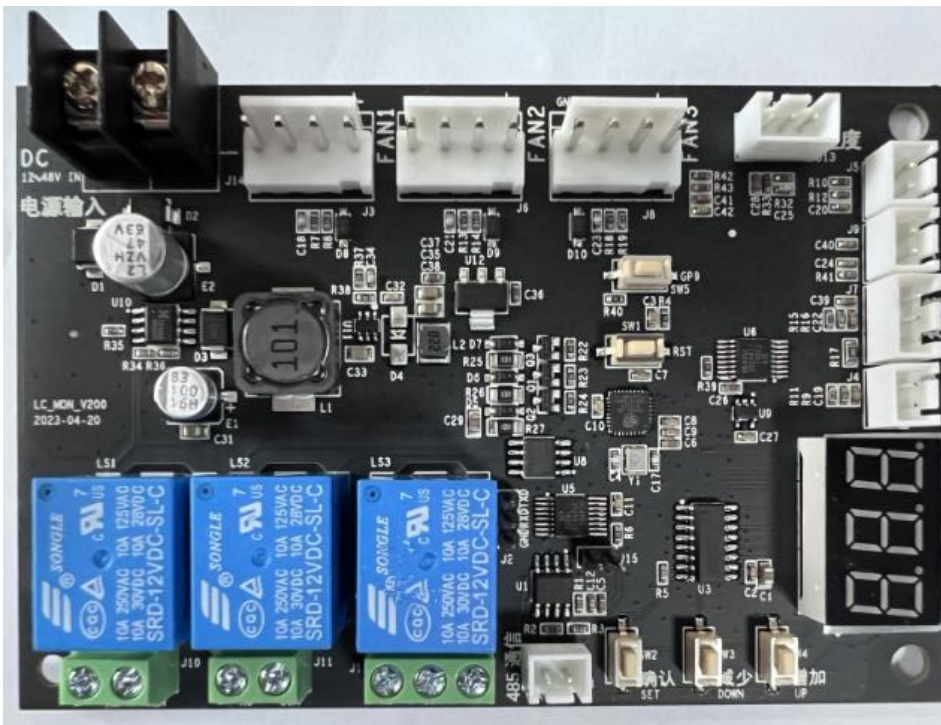
3. Key Setting Instructions

3.1 Three-digit LED display
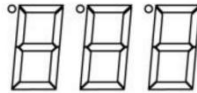
The three buttons are: confirm "SET", decrease "DOWN", and increase "UP". Parameters can be queried and set through the buttons. The digital display cycles through the running status by default. The display order is: external NTC temperature, DHT11 temperature, DHT11 humidity, board temperature, FAN1 speed, FAN2 speed, FAN3 speed, alarm (if any, the alarm code is displayed).

3.2 Menu and operation：

When in loop display mode, press 'SET' to enter the menu, and it will return to loop display after 5 seconds of inactivity.

Press "DOWN" or "UP" to switch between sub-menus "S-P", "C-P", "Err", and press "SET" to enter a submenu after switching to a submenu.

3.3 Submenu Description：

Press "C-P" to view the operating data, and press "DOWN" or "UP" to switch data numbers: "D00", "D01", "D02", "D03", "D04", "D05", "D06". Once you have switched to the desired number, press "SET" to display the data, then press "SET" to return to the previous level.

"Err" to view alarm data, press "DOWN" or "UP" to switch alarm number.

"S-P" setting parameters. To enter this menu, first enter the password, press "SET" to switch digits, and press "DOWN" or "UP" to modify the value. If the password is correct, you will automatically enter the next level menu. Then press "DOWN" or "UP" to switch the parameter number to be set, press "SET" to enter, press "DOWN" or "UP" to modify the value, and then press "SET" to return to the previous level.

4. Data Label Table

4.1 Operation data number table

Number	Name	Remark
D00	**NTC temperature**	
D01	**DHT11 temperature**	
D02	**DHT11 humidity**	
D03	**Board temperature**	

D04	FAN1 speed	Speed value = Display value * 10
D05	FAN2 speed	Speed value = Display value * 10
D06	FAN3 speed	Speed value = Display value * 10

4.2 Alarm Data Number Table

Number	Name	Remark
E01	High temperature alarm inside the cabinet	
E02	Low temperature alarm inside the cabinet	
E03	Low Voltage alarm	
E04	High Voltage alarm	
E05	FAN1 fan failure	
E06	FAN2 fan failure	
E07	FAN3 fan failure	
E08	Temperature sensor failure	
E09	Humidity sensor failure	
E10	Smoke sensor failure	
E11	Temperature sensor failure	
E12	Access control sensor failure	
E13	High temperature alarm	

4.3 Parameter Data Number Table

Number	Name	Default value	Setting range
P00	High temperature alert temperature	55	30～75
P01	Low temperature alert temperature	-15	-45～10
P02	Heating on temperature	-10	-30～15
P03	Heating off temperature	5	0～23
P04	FAN1 Fan speed control starting temperature	30	5～34
P05	FAN1 Fan speed control termination temperature	45	35～65
P06	FAN1 Fan speed control starting PWM percentage	30	0～99
P07	FAN1 Fan speed control termination PWM percentage	90	0～99
P08	FAN2 Fan speed control starting temperature	30	5～34
P09	FAN2 Fan speed control termination temperature	45	35～65
P10	FAN2 Fan start-stop return difference	10	0～15
P11	FAN2 Fan speed control starting PWM percentage	30	0～99
P12	FAN2 Fan speed control termination PWM percentage	90	0～99
P13	FAN3 Fan speed control starting temperature	30	5～34
P14	FAN3 Fan speed control termination temperature	45	35～65
P15	FAN3 Fan start-stop return difference	10	0～15
P16	FAN3 Fan speed control starting PWM percentage	30	0～99

P17	FAN3 Fan speed control termination PWM percentage	90	0～99
P18	Heating state fan pulse width percentage	60	0～99
P19	Humidity control function on/off	0	0：Off；1：On
P20	Smoke detection function on/off	0	0：Off；1：On
P21	Water immersion function on/off	0	0：Off；1：On
P22	Access control function enabled/disabled	0	0：Off；1：On
P23	Set communication address	1	1～254
P24	Reset to factory settings	0	0：No recovery；1：Recovery
P25	Dehumidification started humidity value	80	50～99
P26	Dehumidification off humidity value	75	45～95
P27	High humidity alarm point	90	50～99
P28	Dehumidification shutdown temperature point	10	5～35