



Android Control Card M79

Specification Product

Version: Ver.1.0

Statement

Dear user friend, thanks for choosing SHENZHEN SYSOLUTION TECHNOLOGY CO.,LTD (hereinafter referred to as Sysolution Technology) as your LED advertising equipment control system. The main purpose of this document is to help you quickly understand and use the product. We strive to be precise and reliable when writing the document, and the content may be modified or changed at any time without notice.

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Trademark



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Certificate

It has certificates in the below:

1. CE、ROHS、FCC、iLAC-MRA、CNAS、APPLUS、Accrtddited Laboratory、Functions Test Report;
2. The information release platform has passed the third-level filing certificate of information system security of the Ministry of Public Security
3. The material of the platform has passed the registration certificate of the license for information network transmission of audio-visual programs;
4. Get Stable and qualified product certificate through national quality inspection.

If the product does not have the relevant certification of the country or region to which it

is sold, please contact the relevant personnel of Sysolution Technology for confirmation or treatment at the first time. Otherwise, if the relevant legal risk is caused, the customer shall bear it or Sysolution Technology has the right to recover.

Update

No.	Version	Updates	Revision Date
1	Ver.1.0	Initial Release	2025.2.25

The document is subject to change without prior notice.

Introduction

Thank you for purchasing our LED control card. We hope you can fully experience the excellent performance of this product. The design of this LED control card complies with international and industry standards, but improper operation may still cause personal injury and property damage. To avoid potential hazards caused by the equipment and benefit from it as much as possible, please follow the relevant instructions in this manual when installing and operating the product.

The M79 control card is a high-performance control card that can operate stably in extremely harsh environments such as high and low temperatures. The performance configuration series specially uses an industrial grade quad core processor with a running frequency of 1.5GHz and memory support of 1GB+8GB (compatible with 2GB+16GB needs to be customized) LPDDR4. Industrial grade CPUs generally have lower performance compared to commercial grade CPUs, but the maximum temperature difference can reach -40 °C to 95 °C. This configuration performance can fully meet the smooth playback of images, 1080P videos, two hard decoders, flash animations, text and other content at the same time.

It can be widely used in outdoor industrial LED display scenarios such as car screens, traffic screens, community screens, and lamp post screens.

Product Features:

1. Stable and reliable performance, supporting a wide temperature range of -40 °C to 95 °C, 5V-12V wide voltage, 7 * 24-hour continuous power supply, with a failure rate of $\leq 0.3\%$.
2. Support gigabit network backup, which can be connected to the network through Ethernet cables, Wi Fi, or 4G. It can also be controlled through a mobile phone and configured wireless like a router;
3. The chip can support GSM, WCDMA, TD-SCDMA, EVDO, TDD-LTE, FDD-LTE and other standards;
4. Support accessing cloud platforms to publish programs, easily achieving remote cluster control of display screens;
5. The hardware design fully considers the user's on-site deployment, operation, and maintenance scenarios, with a simple structure that saves space, reduces wiring, and makes installation easier for users;
6. Software and platform design run stably and maintain efficiently.

Apply UV triple proof adhesive, with a national standard protection level of 85, which is dustproof, moisture-proof, anti-static, and salt spray resistant.

Functions&Features

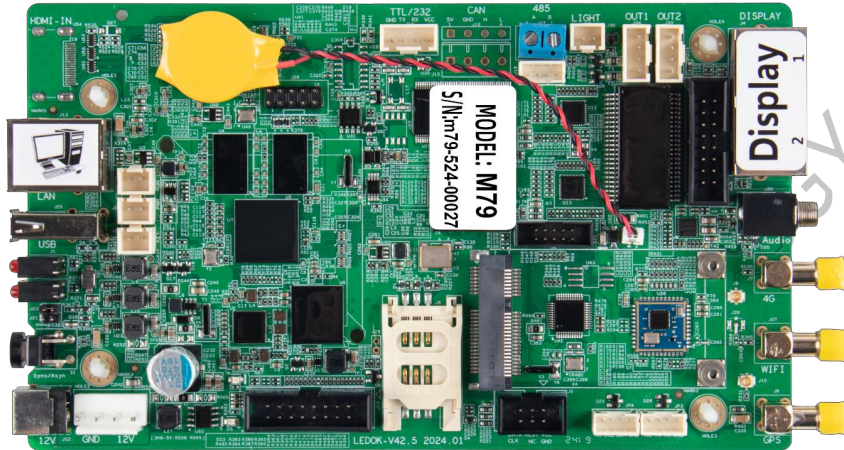
1. Dual gigabit network port output, which can be used as a backup to ensure stable image transmission;
2. Powerful processing performance, 4-core processor, clock speed of 1.5GHz, supports 1080P video hard decoding, 1GB of RAM, 8GB of internal storage space, user available 4GB;
3. Support playing programs according to the program schedule;
4. Support secondary development and remote cluster control on cloud platforms, such as centralized program publishing, setting timed power on/off, volume, brightness, remote power off, etc;
5. Onboard RS485 interface, convenient for front-end devices to control the brightness adjustment, playback image control, power on/off, and other command operations of the back-end display screen. External eight element environmental sensor R68, displaying environmental information without the need for secondary development;;
M79 can automatically adjust the brightness of the display screen and requires a brightness sensor to be matched;
7. Supports three communication methods: wired network, WIFI, and 4G, making it easy to deploy in on-site environments. The 4G module is optional and the module model varies from country to country. Please provide the country of use for shipment;
8. Support switching between AP mode and Station mode. AP mode: M79 emits hotspots that are found by other devices; Station mode: M79 does not emit hotspots, but connects to hotspots emitted by other devices;
9. The user terminal connects to the AP hotspot that comes with M79, with a default SSID of "SN number" and a default password of "12345678";
10. Supports USB cameras;

11. Supports GPS timing/synchronization, NTP precise automatic timing, ensuring synchronized playback of multiple screens;

12. Supporting software: AIPS4.0 cloud release platform, PC software LedOK Express, mobile app: LedOK Lite.

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Image



Parameters

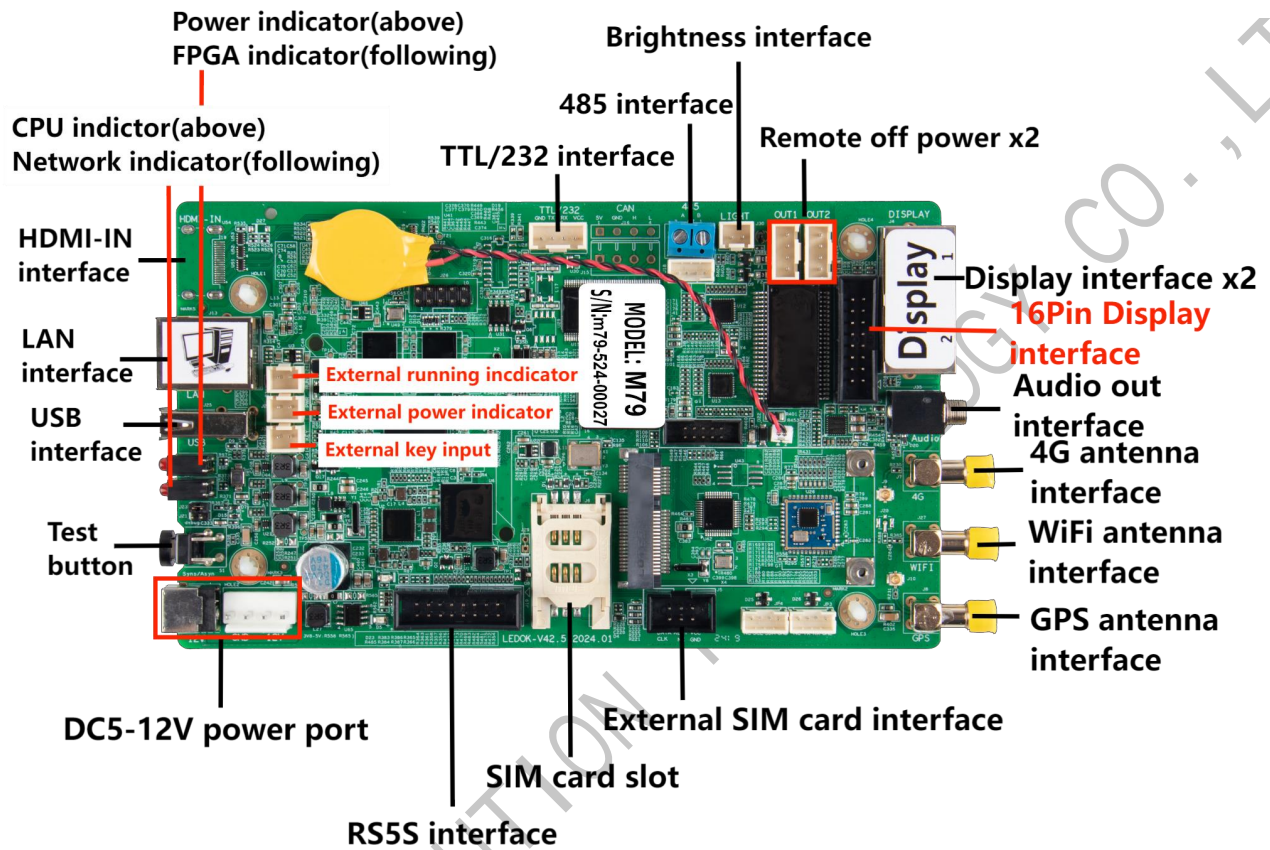
Features	Description
Type	M79 (No 4G) /M79-4G Control box, M79-4G Naked card
Pixel	M79: 130 pixels, The widest resolution in pixels1920, Maximum pixel 1920
Communication mode	Network port、WiFi、USB、optional 4G module
CPU	Cortex-A35 4 Core main frequency 1.5GHz
GPU	Mali-G31MP2 OpenGL ES3.2, Vulkan 1.0, OpenCL 2.0 Dvalin-2EE
System memory	8GB Emmc+1GB LPDDR3
Operating system	Android 9.0
WiFi	IEEE 802.11b/g/n 2.4G
GPS	GNSS GPS/Beidou/Glonass
Other interface support	1 channel stereo audio output. 1 line HDMI input 1 USB2.0 port. - Support play program through USB. 1 RS485 port, 1 RS232、1 TTL serial port. Connect to light sensor or other sensors, as well as connecting to other modems to realize other functions.

Configuration software	LedOK Express	
Support frequency band		
Type	3G/4G (optional)	Certificate
M79-CH	-China (China/India) FDD-LTE: B1/3/5/8 TDD-LTE: B38/39/40/41 TDSCDMA: B34/39 WCDMA: B1/8 CDMA 1X/EVDO: BC0 GSM: B3/5/8	Compulsory Certification: SRRC/ NAL/ CCC Others: WHQL

M79G	-Global FDD-LTE: B1/2/3/4/5/7/8/12/13/ 18/19/20/25/26/28 TDD-LTE: B38/39/40/41 WCDMA : B1/2/4/5/8/6/19 GSM: 4 Frequencies	Operator certification: Deutsche Telekom/ Verizon/ AT&T/ Sprint/U.S. Cellular/ Telus Mandatory/consistent authentication: GCF/ CE/ FCC/ PTCRB/ IC/ Anatel/IFETEL/ SRRC/ NAL/ CCC/ KC/ NCC/ JATE/ TELEC/ RCM/ NBTC/ IMDA/ICASA Others: WHQL
M79-NA	-North America FDD-LTE: B2/4/5/7/12/13/17 WCDMA: B2/4/5	Operator certification: AT&T/ T-Mobile/Rogers/ TelusVerizon/AT&T (FirstNet)/T-Mobile/U.S. Cellular/Rogers/ Telus Mandatory/consistent authentication: FCC/ IC/ PTCRB Others: WHQL

M79-EU	-Eurasi (EMEA/Korea/Thailand/India and other Asian countries) FDD-LTE: B1/3/5/7/8/20 TDD-LTE: B38/40/41 WCDMA: B1/5/8 GSM: B3/5/8	Operator certification: Vodafone/Deutsche Telekom/SKT/ Telefónica Mandatory/consistent authentication: GCF/ CE/ KC/ NCC/RCM/ FAC/ NBTC/ICASA Others: WHQL
M79-LA	-Latin America (LA/AU/Newsland) FDD-LTE: B1/3/5/7/8/28 TDD-LTE: B40 WCDMA: B1/2/5/8 GSM: B2/3/5/8	Compulsory Certification: GCF/ FCC/ Anatel/ NCC/RCM Others: WHQL
M70BS-J	-Japan FDD-LTE: B1/3/8/18/19/26 TDD-LTE: B41 WCDMA: B1/6/8/19	Operator certification: NTT DOCOMO/SoftBank/ KDDI Compulsory Certification: JATE/ TELEC others: WHQL

Definitions



Layout definitions

Working conditions

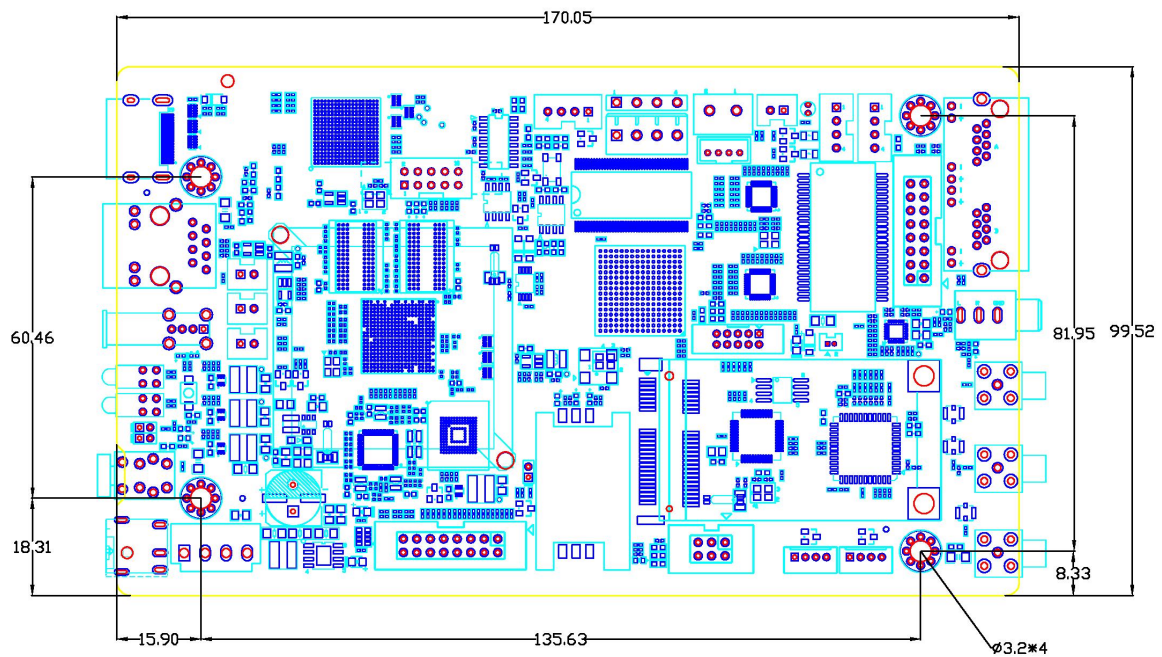
Working parameters	
Working voltage (V)	12V
Working current (A)	0.9A Max: 3A
Maximum working power consumption (W)	10
working temperature (°C)	- 30°C ~ +75°C
Storage temperature (°C)	-40°C ~75°C, Recommend 5°C ~35°C
Humidity of working environment (%)	10% ~ 90%, No condensation
Size (mm)	Naked card: 170.5mm×100.02mm box: 170mmx129mm
Net weight (g)	Naked card: 135g, box: 467g
Packaging information	Accessories: HDMI cable x1, WiFi Antenna x1

1. It is recommended to use an independent (12V/3A or above) power supply for the control card;
2. High working temperature will cause a sharp decline in power efficiency. If the control card and the module share the same power supply, please ensure that the control card has a stable voltage and a reasonable actual current supply.

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Dimension

M79 installation dimension without box

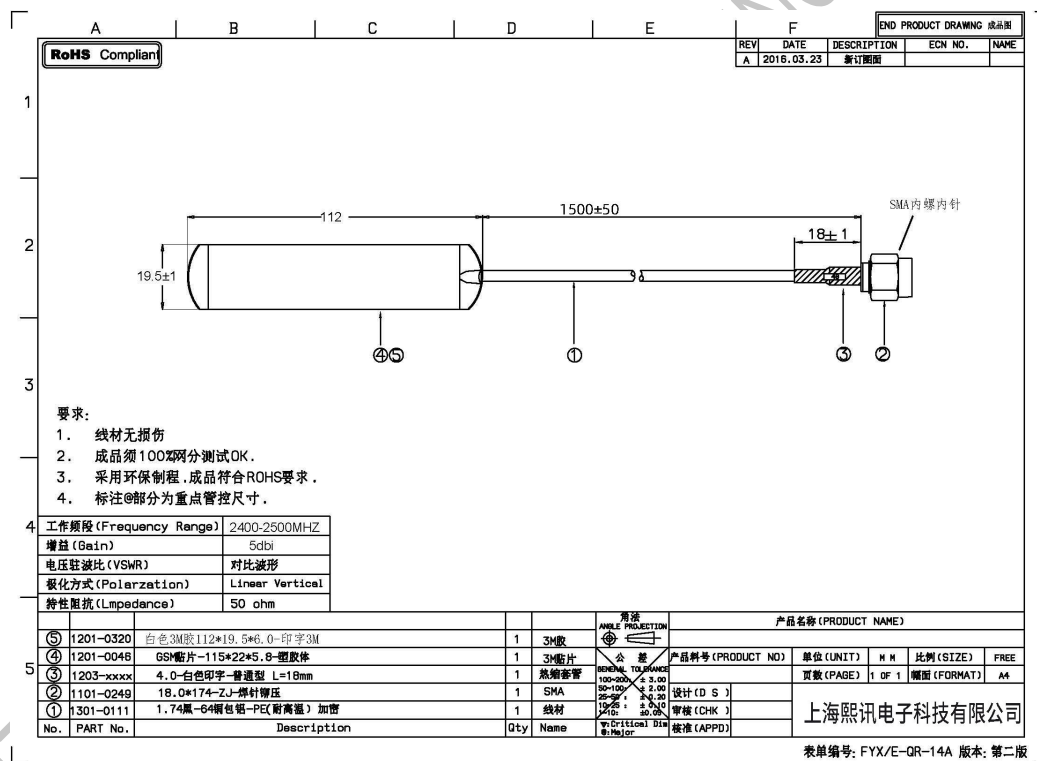


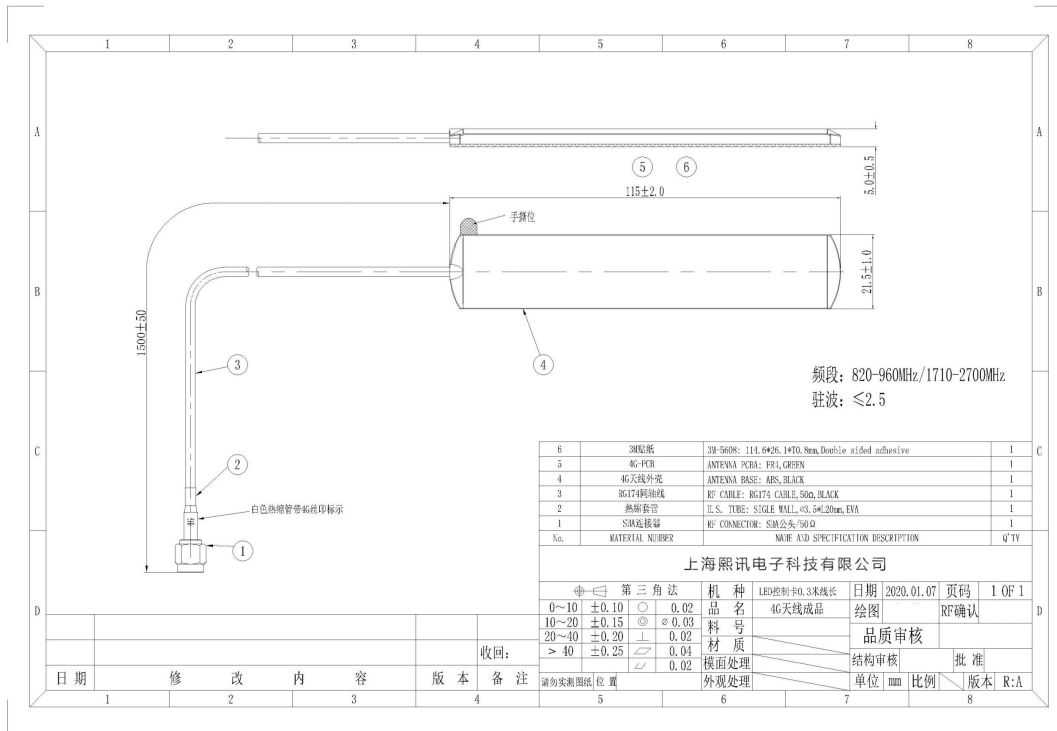
unit: mm

Accessories

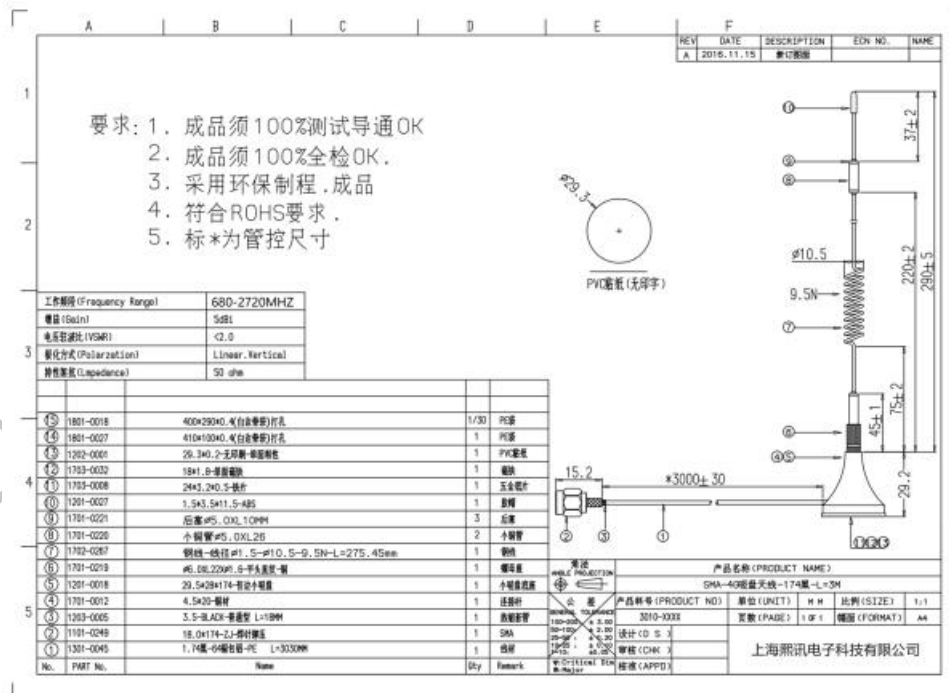
Standard accessories	Size/Quantity
WiFi Patch antenna	1.5m*1
4G Patch antenna	1.5m*1
Optional accessories	Accessory function
Humidity lineRH1	Used to detect the humidity of the current external environment
Brightness lineRL2	Used to sense the brightness of the current environment
Optional multi-function card RS5 integrated synchronization module, 5-way voltage detection, door opening and closing and smoke interface (optional RD1 door sensor, RM1 smoke sensor)	Power detection
Eight in one environmental sensor R68	Temperature, humidity, illumination, PM2.5, PM10, noise, wind speed, wind direction
Electric quantity statistics RM1275	Real-time view of daily electricity

	consumption
G11 GMous multimode	GPS Positioning module
33W horn*2 RLB1	Two remote broadcasts per screen, real-time shouts
Matching accessories (the above options, according to the order needs to place another corresponding model)	





4G antenna



4G Suction Cup Antenna (optional)

Notes

1. The input voltage of this product's power supply is 12V, with a voltage range of 5V to 12.5V. Please strictly ensure the quality of the M79 series power supply.

When you need to connect or disconnect any signal or control wires, please make sure that all power cords have been unplugged beforehand.

3. When you want to add hardware devices to this product or remove hardware devices from this product, please confirm all signal lines and power supplies

The cable has been unplugged beforehand.

Before performing any hardware operation, please turn off the power of the control card and release static electricity on your body by touching the grounding surface.

5. Please use in a clean, dry, and ventilated environment. Do not put this product in high temperature, humid, or other environments.

6. This product is an electronic product. Please keep away from sources of fire, water, and flammable and explosive dangerous goods.

7. This product contains high-voltage components. Please do not open the chassis or repair the device yourself.

If any abnormal conditions such as smoking or odor are found, please immediately turn off the power switch and contact the dealer.