



时祺地磁车辆检测系统

VEHICLE SUPERVISION SYSTEM BASED ON GEOMAGNETIC SENSORS

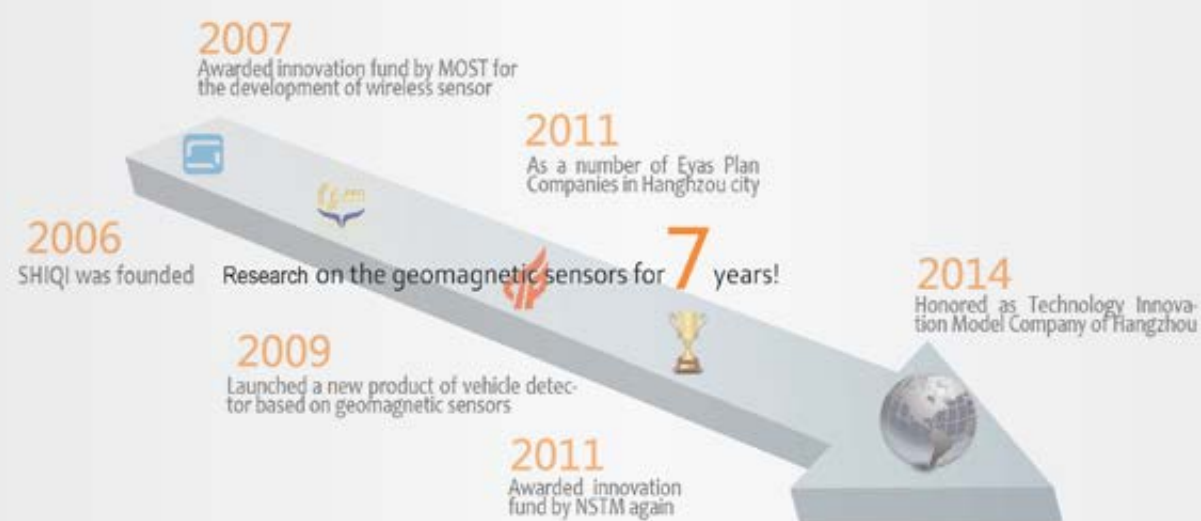


时祺科技
SHIQI TECH



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一、About SHIQI TECH

Hangzhou SHIQI technology co., ltd. is created by some accomplished professors and doctors from Zhejiang University in 2006. The core developers have the rich experience worked in the international famous enterprises such as IBM, HUAWEI.

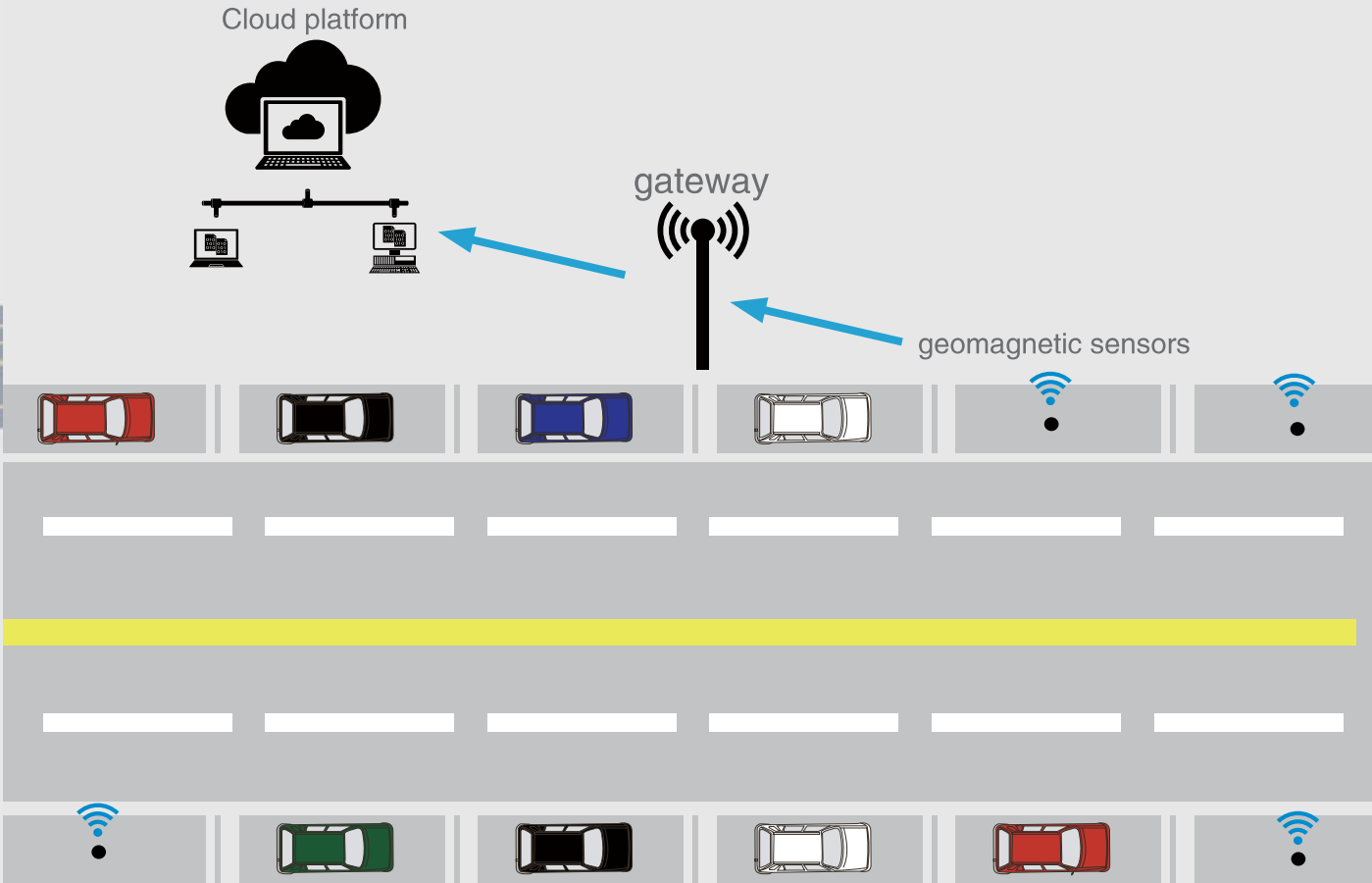
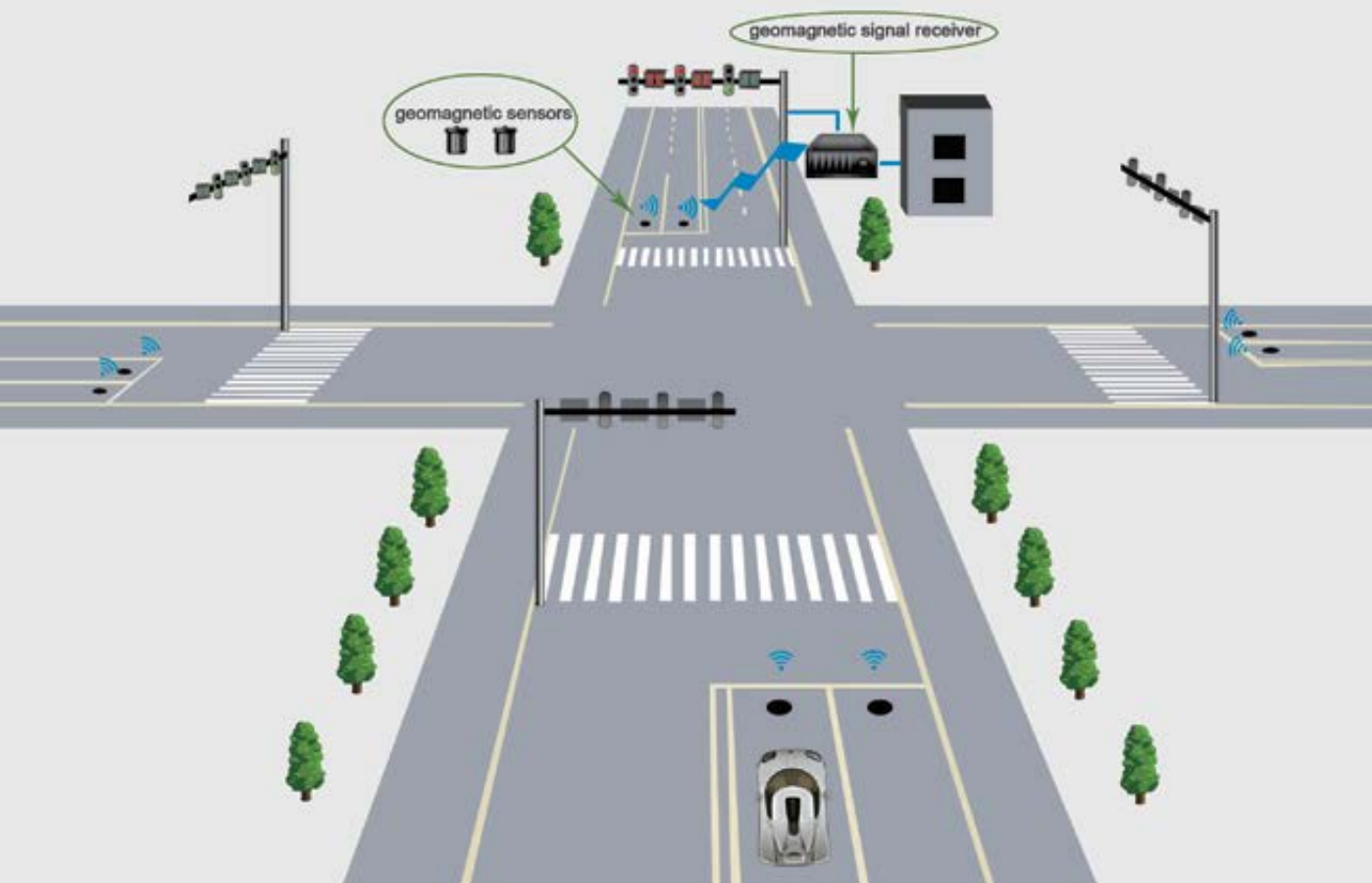
In 2007, 2011, SHIQI won the project approval certificate of innovation fund from MOST (Ministry of Science and Technology of the People's Republic of China) because of the innovative products. For the same reason, SHIQI was honored as the Eyas Plan company, Technology Innovation Model Company in Hangzhou City, and Outstanding Medium-sized company of science and technology in Zhejiang province. In the field of wireless sensor research, SHIQI TECH has 3 patents of invention, 4 utility model patents and 5 pieces of software copyright.

Since the company was founded in 2006, SHIQI TECH committed to the wireless magnetic vehicle detector development, design, production, sales and service.

In the process of development, SHIQI TECH forms a team people who good at design, research and development, production, services in the industry of vehicle supervision based on geomagnetic sensors.

SHIQI people insist on the guide line of honesty, trust, service, cooperation and development as well as punctilious spirit of work and the style of continually improving to serve each client.

We sincerely welcome the customers such as project traders and agents to negotiate with our company and share the success in the future.



二、Solution to the System

1、Traffic Signal Control System

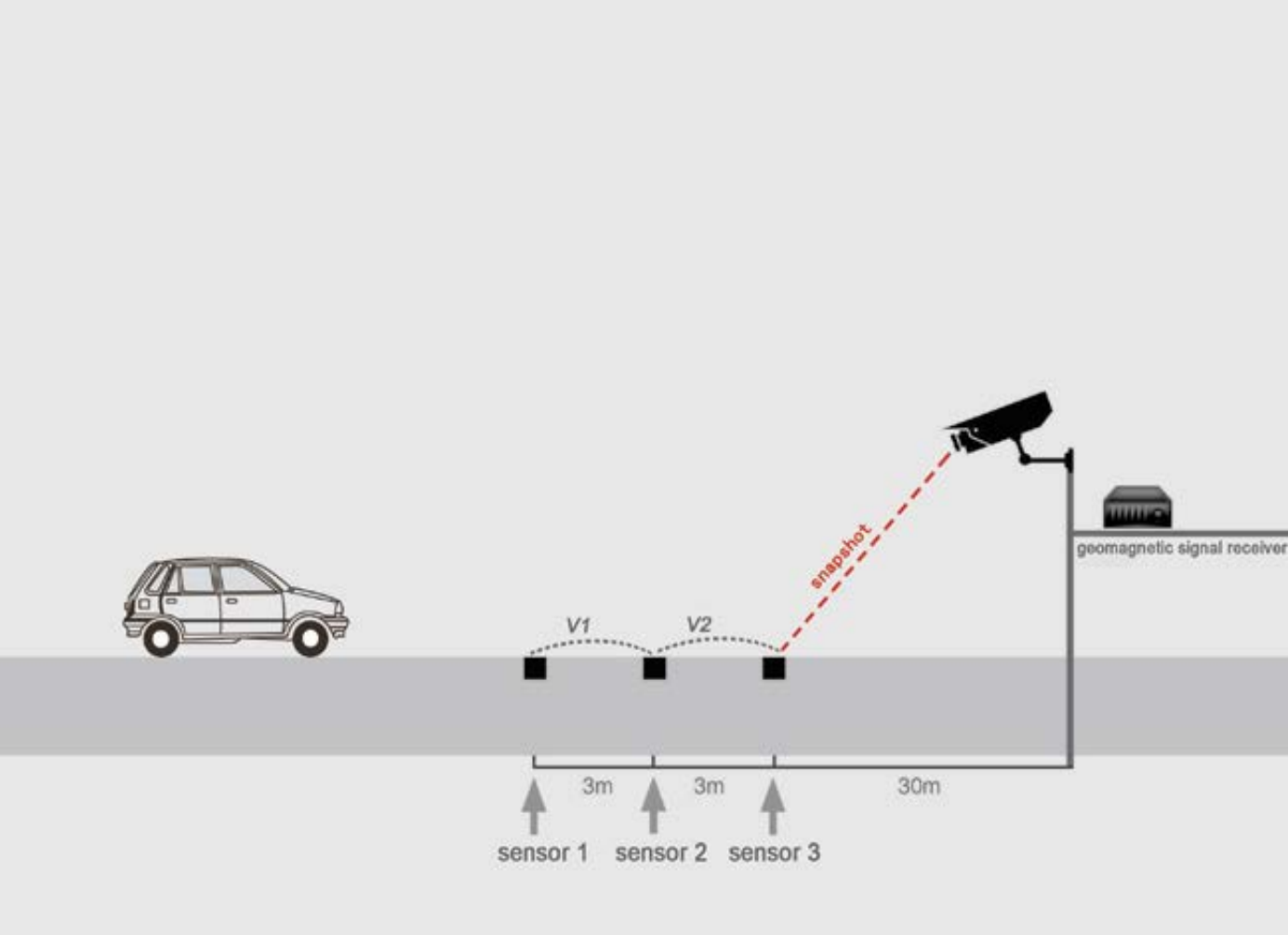
Collecting and making analysis of the information from traffic flow at the crossroads, the wireless geomagnetic vehicle detectors transmit data to wireless geomagnetic signal receiver. In this way to achieve control of the traffic lights and regulate traffic flow effectively. Traffic congestion is reduced.

- Features:**
- 1、Above 99% accuracy
 - 2、Needn' t wiring, which avoid being crushed by vehicles
 - 3、433 MHz、470MHz、2.4GHz and others are adaptable
 - 4、Multiple output interface fit for corresponding equipment
 - 5、Communication interface are equipped including RS485、RJ45、GPRS、WIFI.
 - 6、Meeting SCATS and applying to TYCO, HISENSE, TELVENT, DINGPENG etc.

2、Vehicle Guidance and Parking Indicator

Wireless geomagnetic vehicle detectors can test the status automatically when vehicles parking and driving away. As base for the data from geomagnetic vehicle detectors, the system calculate the parking fee accurately and achieve to parking guidance effectively.

- Features:**
- 1、Above 99% accuracy
 - 2、Test the status automatically when vehicles parking and driving away
 - 3、Equipped with a variety of communication interfaces such as RS485, RJ45, GPRS and WIFI.

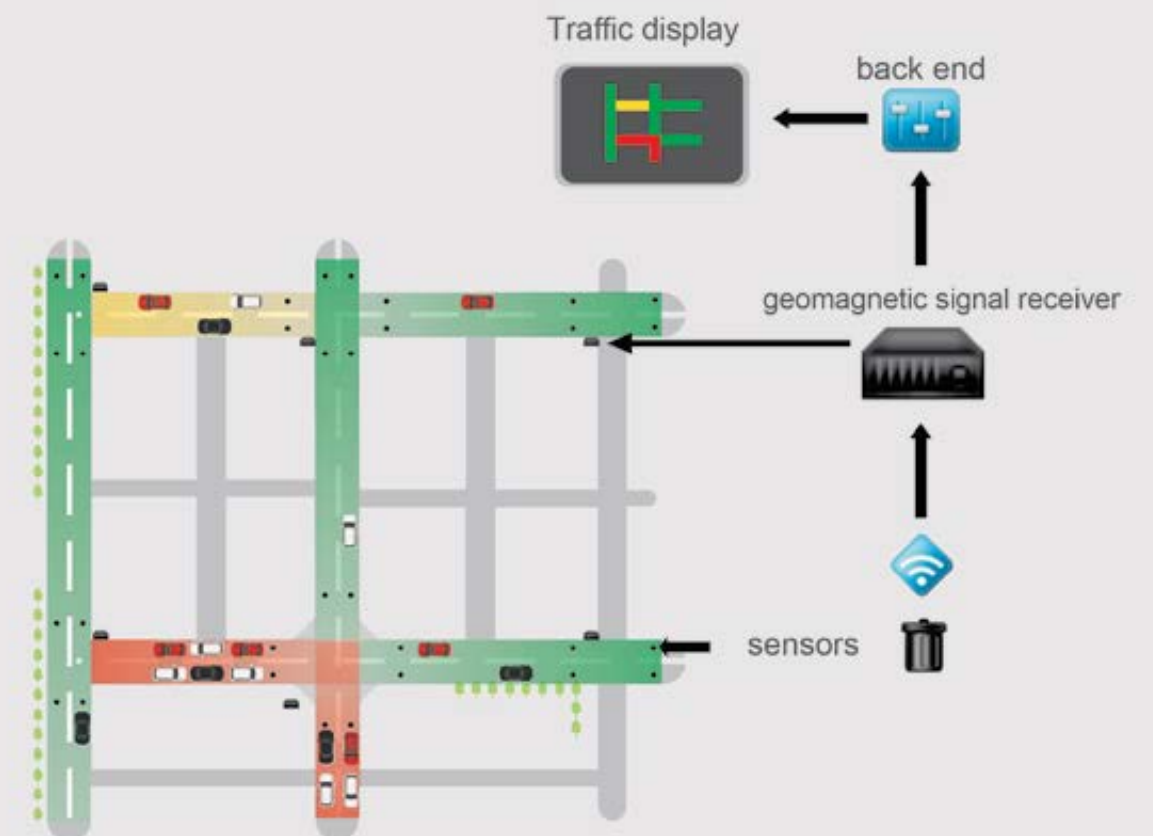


3、 Automatic Detecting and Recording System of Vehicles for Violation of Traffic Signal

Wireless geomagnetic signal receiver sends instruction to video equipment when the detectors transmit traffic data and speed data to the receiver. Vehicle supervision system command speeding capture and do a statistics of traffic flow.

Features:

- 1、 Above 99% accuracy
- 2、 Response time is less than 30 seconds, enough to take snapshot the overspeeding vehicle
- 3、 Multiple output interfaz fit for corresponding video equipment and connect to camera network freely.
- 4、 Optional combination: 2 or 3 geomagnetic vehicle detectors
- 5、 No positive error when speed measuring error less than 3%
- 6、 Round-the-clock monitoring no matter what the the light and the climate is.



4、 Inter-spot Speed Detection and Traffic Jams Detection

Geomagnetic vehicle detectors are installed underground at the crossroads and entrance. Signal receiver analyzes the information of average speed and road capacity that the geomagnetic vehicle detectors captured. Master station commands the road traffic-induced as to traffic congestion.

Features:

- 1、 In the real time it will be effectively detected information of node flow by the geomagnetic vehicle detectors which installed underground between starting point and shunt on the road.
- 2、 Sensors transmit the interval traffic data to master station, so that the master station calculate the data such as road capacity, congestion index.
- 3、 The traffic is induced suitably by master station because of the real-time data sources.



Wireless geomagnetic vehicle detector

三、Products

Wireless geomagnetic vehicle detector system can detect vehicle passing information and do statistical analysis of traffic, which is better to replace the traditional coil type. It can be applied to urban transportation, highway traffic information collection, light control, measuring speed at traffic checkpoint, red light running snapshot, etc. It does not need wiring when installing the wireless geomagnetic vehicle detectors, also does not require an external power supply. The product has a strong adaptability and it can work in various complex weather conditions.

Comparison of Several Ways Collecting Traffic Data

	geomagnetic sensors	induction coil	video monitoring	microwave radar
Installation	Needn't wiring and breaking the road	Breaking the road and wiring	Needn't wiring and breaking the road	Needn't wiring and breaking the road
	Needn't Setting up a utility pole	Needn't Setting up a utility pole	Setting up a utility pole	Setting up a utility pole
Maintenance	Not easy to damage 7 years maintenance-free	Easy-damaged/do a maintenance every 6-9 months	Not easy to damage	Not easy to damage
Influenced by the environment	Anti-interference	Anti-interference	Influenced by the light interference and climate	Influenced by the light interference and climate
overall cost	low cost	low cost	high cost	high cost

SHIQI Production of Geomagnetic Vehicle Detector

Technical advantages:

- 1、With the help of the certified patent technology SHIQI develops and manufactures the wireless geomagnetic vehicle detectors with high reliability and low power consumption, which have a good work for more than five years. The captured information transfer within a distance of up to 100 meters in an open horizon.
- 2、Above 99% accuracy
- 3、Detection sensitivity is adjustable from level 100 to level 255
- 4、A variety of work mode can be set such as traffic statistics, real-time detection, transmission mode at non-working time and sleep mode, which meet the different application requirements.
- 5、Because of its detection function that to be used for calculating for timeout stay, the product can be used in various applications such as illegal parking.



wireless geomagnetic signal receiver

Wireless Geomagnetic Signal Receiver

Wireless geomagnetic signal receiver change the captured data into the switch signal, pulse signal and communication data. And then receiver transfer them to the teleseme in real time.

The receiver match several telesemes from TYCO、HISENSE、TELVENT、DINGPENG.It supports 32 switch output(optional) and 8 traffic lights test input(optional).A variety of communication interface are equipped including RS485、RS232、USB、RJ45、GPRS、CDMA、WIFI.

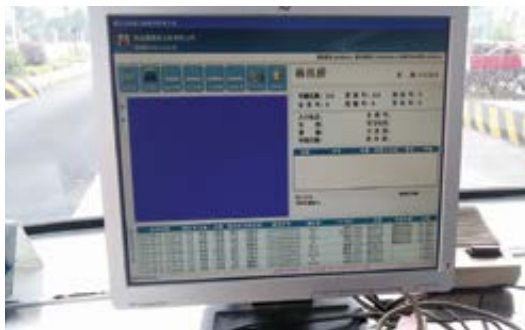
Technical advantages:

- 1、Equipped with electric potential Output interface(12V or 24V) ,pulse output interface and others.Meeting
- 2、Meet the SCATS standard.
- 3、Several output modes can be set,including enter-triggered mode, leave-triggered mode and others.
- 4、Above 99% accuracy

4. Test Reports



五、Application Cases



Federal Communications Commission (FCC) Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications made to this device not expressly approved by **Hangzhou ShiQi Technology Co., Ltd.** may void the FCC authorization to operate this device.

Note: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.



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