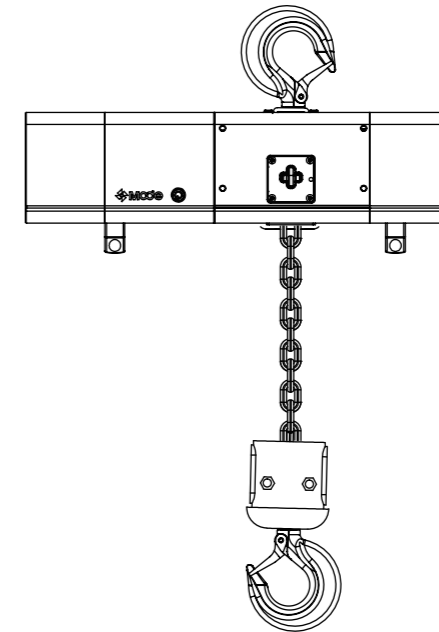




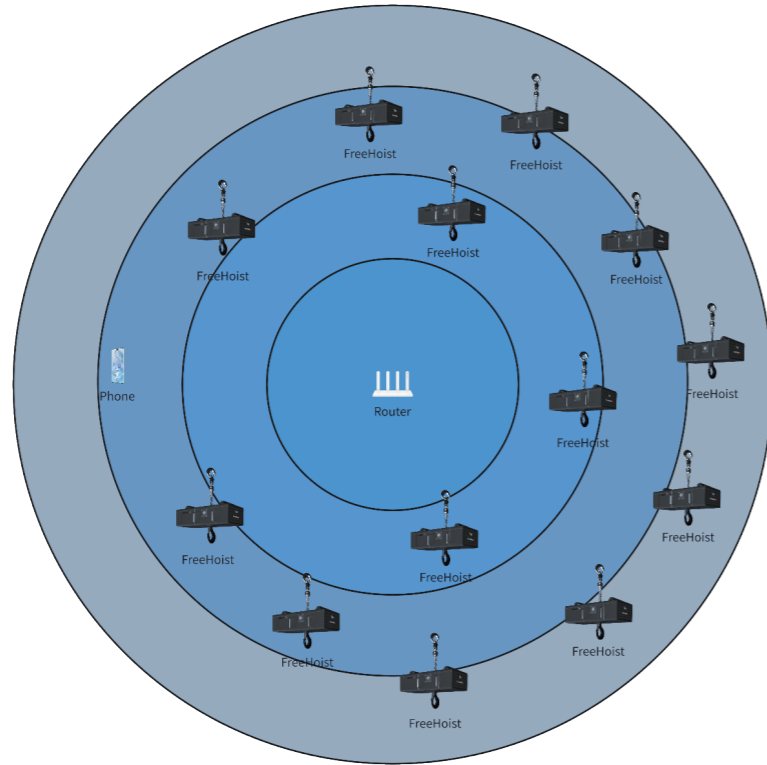
Original Instructions



Mode China

Contact number: 010-8678 1888

FREEHOIST
Instruction Manual



Schematic diagram of a single router connection

01 Connection method

- ① Connection steps: power on the router – software connection – FreeHoist boot;
- ② FreeHoist uses wireless connection for network group control;
- ③ Users do not need to make any settings for FreeHoist;
- ④ FreeHoist will automatically find and connect to a specific wireless signal source after booting;

Question: How far can it be controlled, and how many hoists can it control at one time?

The control distance and control quantity are directly related to the performance of the wireless router. The following will introduce how to choose a wireless router.

	RF Performance	Receiver Sensitivity	Transmit Power
2.4 GHz: • 2400-2483.5 MHz	802.11b/1 Mbps	-99 dBm ±2 dB	18 dBm ±2 dB
	802.11b/11 Mbps	-90.5 dBm ±2 dB	18 dBm ±2 dB
	802.11g/6 Mbps	-94 dBm ±2 dB	18 dBm ±2 dB
	802.11g/54 Mbps	-77.5 dBm ±2 dB	17 dBm ±2 dB
	802.11n/HT20 MCS 0	-94 dBm ±2 dB	18 dBm ±2 dB
	802.11n/HT20 MCS 7	-75 dBm ±2 dB	16 dBm ±2 dB
5 GHz: • 5150-5250 MHz • 5250-5350 MHz • 5470-5725 MHz • 5725-5850 MHz	802.11a/6 Mbps	-94 dBm ±2 dB	16 dBm ±2 dB
	802.11a/54 Mbps	-76.5 dBm ±2 dB	14 dBm ±2 dB
	802.11n/HT20 MCS 0	-94 dBm ±2 dB	16 dBm ±2 dB
	802.11n/HT20 MCS 7	-74.5 dBm ±2 dB	13 dBm ±2 dB

Ⓢ To maintain compliance with the RF exposure requirement, a separation distance of 20 cm between the device and the human should be maintained.

02 Router

A / Select the basic parameters of the router

- WIFI: WIFI5 or above
- Speed: 300M or more is recommended;
- Transmission standard: 802.11n/b/g;
- Wireless frequency band: 2.4GHz / 5GHz;
- Antenna and processor: This is an important parameter of the wireless coverage of the router and the ability to connect to the terminal, which needs to be tested by the user.

B / FreeHoist recommended parameters for the router

Configuration

- CPU: IPQ5018, dual core 1GHz processor;
- RAM: Memory: 256 MB RAM(Byte);
- ROM: FLASH memory: 128M FLASH (Byte).

Wireless parameter

- Transmission standard:802.11ax/ac/n/a 2*2 & 802.11ax/n/b/g 2*2;
- Wireless speed: dual frequency concurrent, 3000Mbps (2.4GHz: 574Mbps, 5GHz: 2402Mbps);
- Wireless frequency band: 2.4GHz & 5GHz, supporting dual-frequency optimization;
- Antenna gain: 2.4G 5dbi 5G 6dbi.

Access terminals

- Can access 128 terminals concurrently.

Effective control distance

- (router wireless signal radius) maximum 100 meters.

C / Router configuration

If the user chooses the company's router, the company has made the standard configuration, and the user can power on the router without any adjustment;

If the user chooses another router, the following settings are required:

- Set the WIFI SSID to MODE_Router_5G;
- Set WIFI Password to mode123456;
- Wireless frequency band: 2.4GHz/5GHz, Recommend using 5GHz;

Question: The control range of a router is limited, how to expand the control range?

If you need to expand the scope of control, please contact us to provide professional solutions for you.

03 APP Operation

A / Select the basic parameters of the router

Using a browser to open the link: <https://www.modehoist.com/service/download/app>

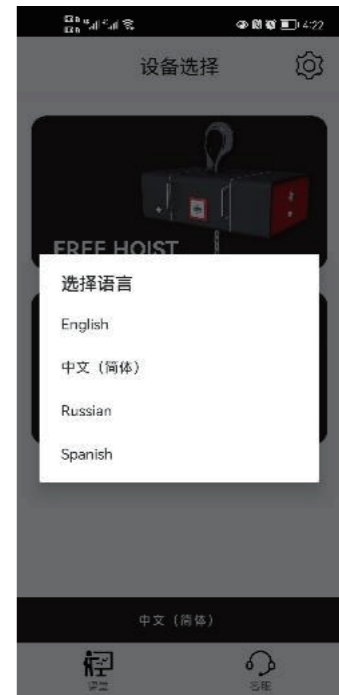
Or scan the following QR code with your mobile browser:



B / Device selection list page

After the app is installed and launched, it will enter the device selection page. Users can select FreeHoist from the list to initiate the device connection process.

- Reduced language (Simplified Chinese, English, Spanish, Russian);
- Preparation users can enter the company's official website through Classroom;
- Preparation users can submit questions to the customer service function at the bottom of the page for consultation mail.



C / Network connection page

- 1 Find the WIFI of MODE_Router_5G on the network connection page, click the arrow on the right to connect, and enter the connection password;
- 2 After the connection is successful, it will be displayed in a black box, click the arrow on the right to enter the control page;

If the user turns off the SSID broadcast when setting up the router, you need to manually add this network:

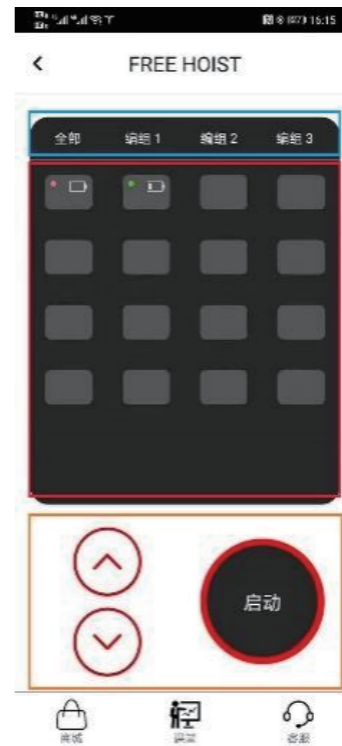
slide the page to the bottom, select Add Network, and manually enter the network name (MODE_Router_5G) and password (mode123456) to connect.



C / Control page

Page introduction

- The control page is divided into 3 areas: product area (red box in the right picture), control area (orange box in the right picture), grouping area (blue box in the right picture);
- When the product is successfully connected for the first time, a gray box in the product area will display a green dot and battery remaining icon;
- When the product is disconnected, the green dot in the corresponding gray box in the product area will turn red, and the remaining battery power is empty.
- After connecting multiple products, please confirm the product corresponding to each gray box on the App.



Basic operation

- Select one or more products to be controlled (it turns red when selected);
- Then select the working direction of the product (up or down arrow);
- And finally press and hold the start button to control the product;
- The product can continue to work only if the start button is pressed all the time; release the start button and the product stops.



Select all operation

The app supports selecting all products at once (the first option in the grouping area).

Group operation

- Select the products that need to be grouped, click group n in the grouping area, and complete the grouping after confirming the prompt;
- Long press the corresponding group, you can edit the name of the group, which is convenient for management and control of multiple products;
- When the grouping is no longer needed, the user can also press and hold the corresponding grouping to reset the grouping.
- The app supports 10 groups of custom groups, and the number of products that can be programmed in each group is not limited.



04 Product security settings

Product Control

- When the product exceeds the effective control distance of WIFI during operation, the product will automatically stop running after 700ms to avoid the situation that the product cannot be controlled beyond the effective control range;
- During the linkage process of multiple products, if one product is disconnected and unable to operate, other products will stop running at the same time to avoid the possibility of products being out of sync and causing danger;
- When the product is connected, it only establishes a unique connection with the first connected App, and the subsequent connected App needs to wait for the product to be completely disconnected from the first connected App before pairing and connecting again, avoiding the danger of multi-person operation conflicts possible;
- When the battery power is lower than 30%, the power indicator light of the product will flash to remind the user to replace the battery to avoid power failure during the work.

App control

- The app restricts the start button to be clicked multiple times in a short period of time to prevent the communication channel from being blocked by frequent signals and increase the control delay;
- When a call comes in during the operation of the product, the App will force all the products to stop working, so as to avoid the situation that the product work is out of sync during the call.

05 Frequently asked questions

Change of control phone

- If the mobile phone needs to be replaced on site to control the product, first of all, it is necessary to ensure that the App of the first mobile phone is completely exited (completely close the connection service with the product), and then wait for 1 minute before trying to connect to the WIFI router;

Unable to connect to the product

- Please check whether the wireless name and password of the WIFI router are set correctly;
- Whether the distance between the product and the WIFI router is within the effective range of WIFI;
- Is there any other WIFI name on site that is the same as the name of the WIFI router, causing conflicts;
- Whether there are other mobile phones connected to the product through the App.

How to solve the large site area

- Please contact our sales specialists, we will provide reliable solutions according to the actual situation of the user site.

Other issues

- You can email us for consultation through the customer service function on the App;
- Send an email to cscentre@modehoist.com for consultation;
- Contact sales staff.





Declaration of Conformity

Name and address of Applicant
MODE CHINA
Room 01, 8/#7 Tower, 4th Area, No. 186, South 4th Ring west Road, Fengtai District,
Beijing, China

Name and address of manufacturer:
Mode Technology Co., Ltd.
No.C55, Zhongguaneun Hegu Innovatien Industrial Park, Chaoyang EastRoad
Zhuozhou Development Zone, BaodingCity, Hebei Province, China

Product name: Free Hoist **Product types:** Free Hoist

Information on the Declaration of Conformity:

MD(2006/42/EC)	EN ISO 12100:2010
	EN 14493-2:2019
	EN 60204-32:2008

Signature


Declaration of Conformity