



FREEHOIST

Lift Smarter

Work Easier

App Control

WIRELESS



MAKE A BETTER WORLD

FREEHOIST

Solving key challenges in stage rigging

No more cluttered stage setups

Eliminate complex cabling for a cleaner, safer, and more organized work environment.

Reduce labor costs

Skip traditional wiring processes to lower installation and maintenance expenses.

Shorten setup time

No time-consuming cabling required—activate equipment quickly and accelerate the entire rigging schedule.

Flexible hoist operation

Operate through an intelligent app for greater freedom and adaptability across diverse stage scenarios.



PRODUCT INTRODUCTION

FreeHoist developed by Mode China in 2021, is the world's first truly wireless stage hoist.

It requires no power cables and no control console, and delivers up to 168 hours of operation on a single charge, meeting the rigging and build-up needs of a wide range of stage productions and events.



Battery-powered

Free from power-cable limitations



Multi-terminal control

It can be operated using handheld controllers, mobile phones or tablets and laptops.



Permanent magnet synchronous motor (PMSM)

Synchronized lifting across multiple hoists with less than 1 cm deviation



FreeHoist D8+
EN17206 Certificate
AK 50705150 0001



UL&CSA Certification



FreeHoist D8+
EN17206 Certificate
AK 50705116 0001

CONTROL FUNCTION



- Configurable handheld controller



Group operation



100m control range



Stable signal

- Control terminal can operate up to 100 hoists simultaneously
- Effective control range up to 100 meters radius
- 2.4GHz & 5.8GHz dual-band wireless communication for enhanced anti-interference
- All hoists automatically stop within 1.5 seconds if one hoist stops to ensure on-site safety
- Custom group names
- Hoist grouping sequence remains unchanged when switching control terminals
- Users can monitor wireless signal strength via the control terminal

PRODUCT FEATURES



Dual brakes



Remote power switch



Limit Switch

- Aerospace-grade aluminum housing for high strength and lightweight design
- Adjustable upper and lower limits with high-precision micro switches cut power automatically at chain extremes.
- Patented 45° chain guide ensures smooth chain operation and reduces jamming.
- A dual electromagnetic brake system significantly reduces the possibility of brake failure, improving operational safety and stability.
- Precision noise-reducing gears provide constant torque with low heat and noise.
- Permanent magnet synchronous motor with fast dynamic response for frequent start-stop and precise positioning, reducing wear and maintenance while extending service life.



POWER LITHIUM BATTERY



Safe and stable operation



Long-lasting service life



BMS control

- The power lithium battery can support the FREEHOIST carrying a load of 800kg over a round-trip distance of 144m.
- The power lithium battery has no "memory effect" and can be charged at any state of charge.
- With weekly charge-discharge cycles, after 6 years of use, the battery still retains 87% of battery life.
- Built-in BMS chip optimizes charge and discharge through balancing management, reducing battery aging and extending service life.
- Power lithium batteries are more environmentally friendly; lithium extraction, use, and recycling do not cause significant environmental pollution.
- Each lithium cell undergoes 17 rigorous tests covering fatigue, degradation, high temperature, charge/discharge, and other dimensions, ensuring stable performance and safety, providing long-lasting and strong power for the wireless hoist.



Battery capacity retention curve

TUV Certification

UN38.3 Test Report



FREEHOIST

Built-in load monitoring function



Load visibility

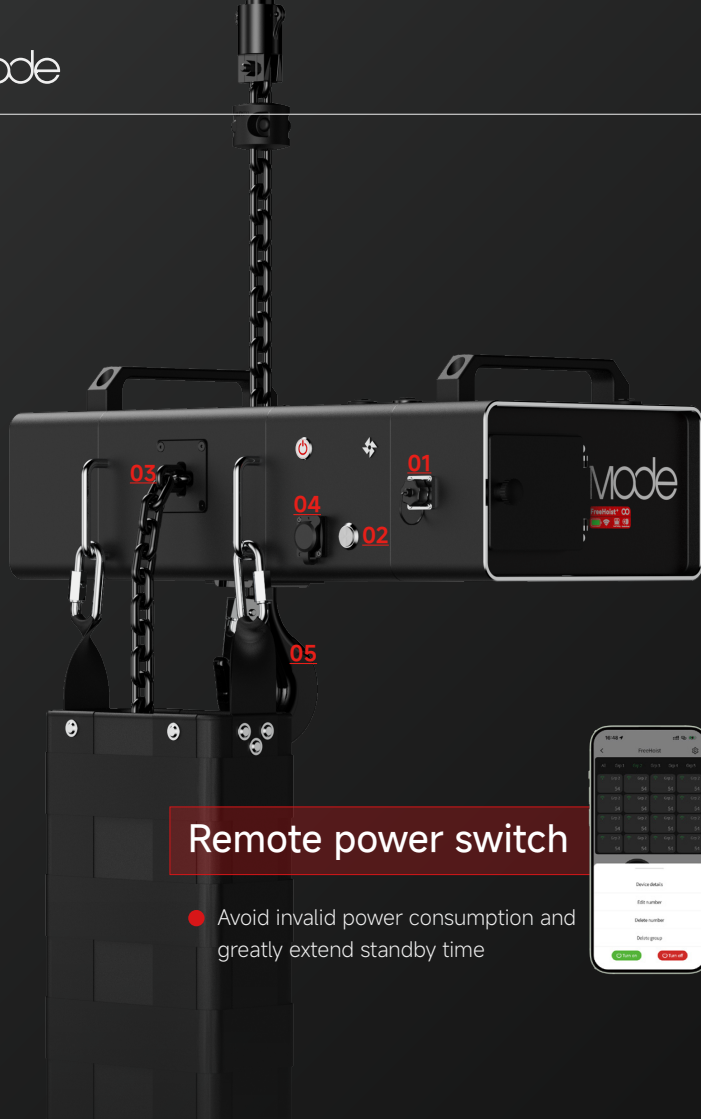


Balanced positioning



Overload warning

- Real-time load monitoring of suspended objects.
- Overload real-time warning to prevent accidents.
- When multiple hoists lift a structure together, each hoist's load can be monitored to ensure even force distribution.



Remote power switch

- Avoid invalid power consumption and greatly extend standby time

01 Charging Port (The battery can also be removed and charged separately.)

02 This button switches operation from mobile/tablet control to pendant mode.

03 Adjustable Upper and Lower Limit Protection

04 Pendant Connection (Pendant plug included).

05 Load Monitoring Hook

Technical parameters

Model	FreeHoist Air	FreeHoist+	FreeHoist+ Super
Dimensions	550*140*257(mm)	550*140*257(mm)	550*140*257(mm)
Battery specifications	36V/180Wh	36V/180Wh	36V/180Wh
Certification	CE	D8+/UL	D8+/UL
Rated payload	1000KG	1000KG	1000KG
Rising speed	3.5M/Min	3.5M/Min	3.5M/Min
Body Color	Gray	Black	Premium Gray
Standard Chain Specification	(Black Oxide) 71x21MM (G80)	(Black Oxide) 71x21MM (G100)	(Black Oxide) 71x21MM (G100) RUD
Electronic Load Limiter	-	●	●
Build-in load sensor	-	●	●
Remote power switch	●	●	●
Wired Control Interface	●	●	●
Noise	53DB	53DB	53DB
Brake	Single Brake	Dual Brake	Dual Brake
Protection degree	IP65	IP65	IP65
Standby time	10 days	25 days	30 days
Wifi	Standard configuration	Standard configuration	Standard configuration
Wireless spectrum	2.4GHz & 5.8GHz	2.4GHz & 5.8GHz	2.4GHz & 5.8GHz
Working grade	M5	M5	M5
Appearance Material	Aerospace-grade Aluminum Alloy	Aerospace-grade Aluminum Alloy	Aerospace-grade Aluminum Alloy



FREEHOIST Application Case



Return of the Journey to the West
Live Show



2025 Kuaishou Super Summer Gala



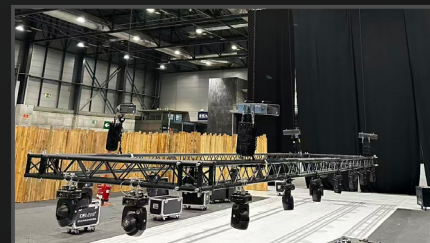
VIVO Launch Event
at the National Aquatics Center



Shanghai Import and Export Expo



National Convention and Exhibition Center (Tianjin)



IFEMA Exhibition, Spain



Korean Youth Para Games



Russian Theatre



Croatian Sports Arena



Guangzhou International Auto Show – Audi Booth



Picnic Fest Music Festival



Star-Studded Concert