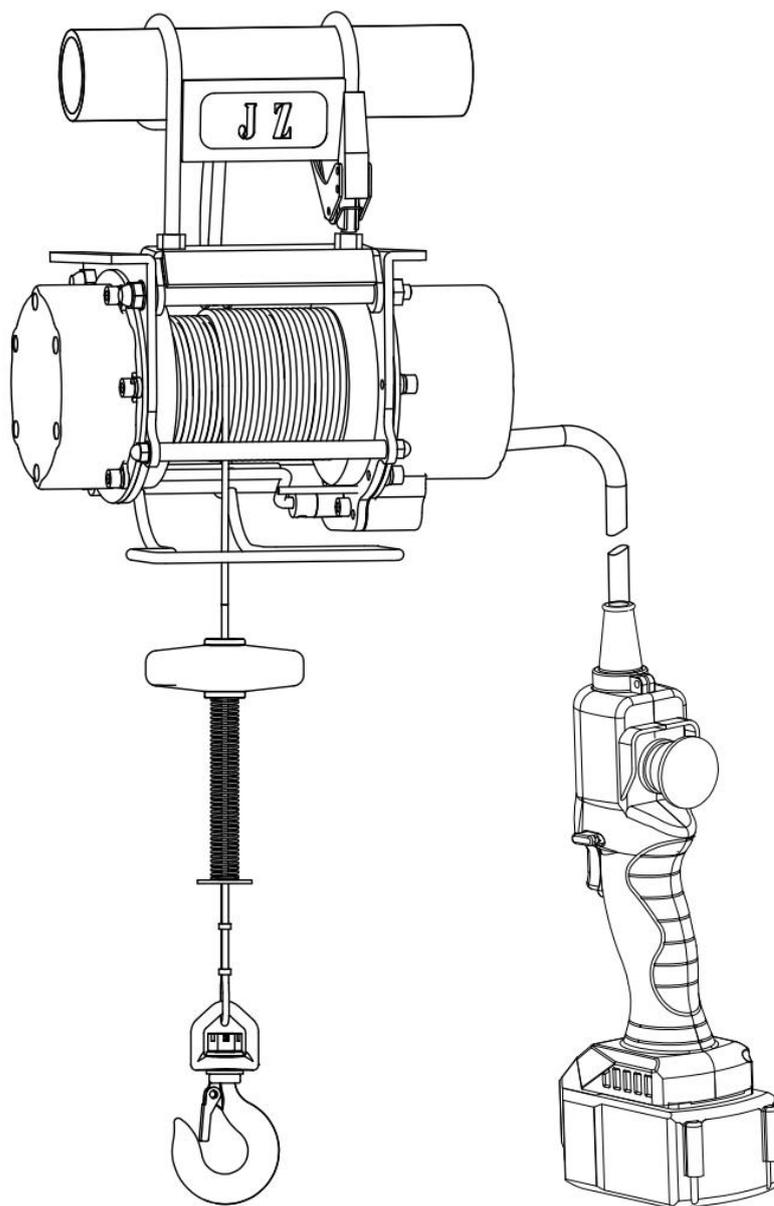




BRUSHLESS DC HOIST

Original Operating Manual



**Zhejiang Yongtian Machinery
Manufacturing Co.,Ltd.
Mingyuan North Road,
Hardware Technological
Industrial Districat Yongkang,
Zhejiang 321300
P.R.China**



Thank you for choosing Yongtian Brushless DC Hoist.

In order to ensure your safety, and to use, maintain the Brushless DC Hoist correctly, please read the manual carefully before use. And keep the manual so that you can assist in repair and maintenance when you need it.

This DC Hoist is designed for certain applications only. Yongtian is not responsible for issues not designed. We strongly recommend that this product not be modified and / or used for any application other than that for which it was designed.

I . Safety Instructions (Important Guarantee)

For your own safety, please always follow the below basic precautions when using this product. Failure to follow these instructions may result in serious personal injury or death.

Warning

● Chemical and Fire Hazards

1. Please read the manual of installation and operation guide carefully before use, in order to understand your Brushless DC Hoist and its operation well.
2. Always wear gloves and safety protection equipment during use to protect hands, eyes and ears.
3. Do not store the battery pack in some toolboxes or pockets with nails, screws, keys, etc. Avoid short-circuiting the battery pack terminals to cause a fire.
4. Do not use the battery pack under extreme conditions of ambient temperature and humidity to avoid leakage of the battery pack.
5. Be sure to dispose and recycle the battery pack in accordance with local regulations.
6. Before handling, protect the terminals with insulating tape to prevent short circuits.
7. Do not try to disassemble the battery pack. There are no user-serviceable parts inside.
8. Do not charge the damaged battery pack, and replace the damaged battery pack immediately. Otherwise, it may cause the battery to short-circuit or catch fire.
9. Do not incinerate the battery pack, even if the battery pack is severely damaged or completely worn out.
10. Do not operate the Brushless DC Hoist in an environment containing explosive or combustible materials.
11. When the Brushless DC Hoist is not used, the battery pack must be taken out.
12. Do not charge the damaged battery pack, and replace the damaged battery pack immediately. Otherwise, it may cause the battery to short-circuit or catch fire.

● Charger Use

1. Be sure to fully charge the battery pack before use.
2. Always use the charger provided by Yongtian to charge the battery pack of Yongtian. Charging other types of battery packs may burst, causing damage and personal injury.
3. Do not use a charger that damages the power cord or plug. Replace them immediately.
4. Do not use Yongtian charger to charge other battery packs.

● Risk of Electric Shock

1. Be sure to use a properly grounded single-phase socket.
2. Do not remove the grounding pin from the plug.
3. Do not touch or scratch the control cable over the edge of sharp or sharp objects. Avoid cutting the control cable and causing electric shock.
4. Do not put the control cable close to or pass through the edge of other working machines. Avoid cutting the control cable and causing electric shock.
5. Do not put the control cable close to the edge of overheated objects. Avoid possible damage to the control cable and electric shock.
6. Do not take the parts on the battery charger and use it on other chargers.
7. When installing, replacing the wire rope, repairing or not using the Brushless DC Hoist, do not turn on the power of the Brushless DC Hoist.
8. Do not disconnect the ground connection.
9. Do not operate the Brushless DC Hoist in a humid or humid environment.
10. Be sure to use the recommended electrical system voltage to power the Brushless DC Hoist. For details, please refer to the parameter table of the Brushless DC Hoist.
11. Do not operate the charger when it is hit, dropped, or damaged in other ways.
12. Do not charge the battery pack in a humid or humid environment.
13. Be sure to charge the battery pack at a temperature between 0°C and 40°C.
14. Be sure to store the battery pack at a temperature between 5°C and 30°C.
15. After the battery pack is fully charged, be sure to disconnect the charger.
16. Do not detect with conductive objects.
17. Be sure to fully charge the battery pack before use.
18. Do not discharge the battery pack completely.
19. If the battery pack is not used, it must be charged once every six months.

● **Cut and Burn Danger**

To avoid injuries to hands and fingers:

1. Be sure to wear thick leather gloves and safety equipment to protect your eyes and ears.
2. Do not short-circuit the battery terminals, as this may cause sparks or burning.

● **Danger of Falling or Crushing**

1. Be sure to use factory-approved installation hardware, components and accessories.
2. Be sure to take the time to learn the basic knowledge and technology of Brushless DC Hoist to operate.
3. Do not impact the load wire rope. Impact load will damage, overload and break the wire rope.
4. Be sure to choose a suitable fixed point that can withstand the load. Make sure that the fixed point you choose can bear a load higher than the corresponding load of the Brushless DC Hoist, otherwise there is a risk of falling.
5. Do not exceed the maximum lifting load weight listed in the product data sheet, including the capacity, safety factor, size, etc. of the wire rope.
6. After the use is completed, the steel wire rope must be wound tightly under stress, and the steel wire rope must be tightly wound on the reel. Winding the wire rope without stress, the wire rope is easy to pile up and scattered, and it is easy to squeeze, deform and damage the wire rope when used again.
7. Avoid turning on/off the Brushless DC Hoist too frequently, otherwise it may damage the motor and the motor controller.
8. Do not increase the lifting length of the rope on the Brushless DC Hoist hook.
9. Be sure to use a hook with a protective buckle.

10. Make sure that the protection hook of the suspension mechanism is hung up during the lifting process.
11. Do not put a load on the tip of the hook or the protective buckle. Apply load only to the center of the hook.
12. Do not use hooks with enlarged mouth openings or bent or twisted tips.
13. Do not use wire ropes that are potentially dangerous when lifting.
14. Do not pull it sideways to avoid the accumulation of steel wire rope at one end of the reel. This will damage the wire rope and Brushless DC Hoist.
15. Do not use Brushless DC Hoist to lift or move people.
16. Do not lift heavy objects overloaded, and do not lift two or more of the same heavy objects.
17. Do not lift fixed objects or heavy objects exceeding the rated weight.
18. Do not stand people under the heavy objects when lifting them.
19. Do not hang heavy objects in the air for a long time to prevent permanent deformation of parts or accidents. Do not inspect or repair during work.

● **Danger of Entanglement of Moving Parts**

1. When installing, operating, and retracting or placing the wire rope, always keep your hands away from the wire rope, suspension mechanism, hook and reel.
2. When operating and winding the wire rope, keep your hands and clothes away from the wire rope, hook and drum.
4. Do not let the wire rope slip through your hands.
5. Do not operate the Brushless DC Hoist under the influence of drugs, alcohol or drugs.

● **Lifting and Operating Safety**

1. During the lifting operation, the lifting load of the Brushless DC Hoist must be kept within sight.
2. When lifting, be sure to stay away from steel wire ropes and heavy loads, and keep others away.
3. When lifting, always pay attention to the stability of the load and keep away from others. Remind all bystanders of any instability.
4. When lifting, the operator and bystanders must be required to pay attention to the steel wire rope and load heavy objects.
5. When the operator is in the process of operation, no one should touch the wire rope or hook when lifting or loading heavy objects.
6. When lifting each time, start at the minimum speed first, so that the load and the wire rope are tightened before lifting. Do not start directly when the wire rope is slack.
7. Before operating the Brushless DC Hoist, be sure to check the wire ropes and hooks for any worn, kinked or damaged wire ropes, and they must be replaced immediately.
8. The damaged parts must be replaced before operation. Protect other parts from damage.
9. The wire rope must be tightly wound on the reel after each use. During the winding or unwinding process, if the wire rope is layered on the reel, the direction of the rope may be unexpectedly changed. It is easy to damage the rope when used again.
10. Do not avoid excessive jogging (such as short pulses to the motor), and do not pull the load sideways.
11. Be sure to wear thick leather gloves when handling and replacing the wire rope.
12. Be sure to remove any components or obstacles that may interfere with the safe operation of the Brushless DC Hoist,
13. Do not start the Brushless DC Hoist when installing, replacing the wire rope, repairing or not in use.
14. Wear thick leather gloves during the operation of winding the wire rope, and be extra careful

when handling the hook and wire rope.

15. Do not operate or install the Brushless DC Hoist without reading or understanding the instructions.

16. Do not operate this Brushless DC Hoist if you are under 16 years of age.

● Other Security Risks

1. The rated lifting capacity of the Brushless DC Hoist is the lifting capacity on the nameplate.

2. Do not disassemble or modify any installation devices on the Brushless DC Hoist at will.

3. In the event of danger and emergency, press the E-stop red button in time, and manually rotate the mushroom head in the direction of the arrow to recover after the danger is removed.



4. The upper limit mechanism and the lower limit mechanism are safety devices that prevent the lifting from exceeding the limit and prevent the wire rope from pulling out of the limit. Do not use the limiter to stop the machine, let alone remove it.

5. When the brake is found to fail during use and the heavy object falls quickly, press the emergency stop button immediately. After unloading, it must be repaired by qualified repair personnel before use.

6. It should be ensured that there is enough grease in each lubrication part. Squeeze in or apply calcium-based grease to gearboxes, bearings and other parts every six months.

7. The Brushless DC Hoist should be fully maintained according to the frequency sensitivity of the use, and the continuous use time of up to 20 hours needs to be fully maintained. Generally, it should be performed at least once a year.

II. Operation Inspection and Use Environment

Before use, it must be run with no load and check the following items:

a. Whether the switch is sensitive, whether the wire rope can pass through normally, and whether the diameter of the wire rope meets the standard;

b. Whether the movement of the stopper is flexible and whether it can be disconnected reliably;

c. Whether there is abnormal noise during operation;

d. Whether the wire rope is damaged (or damaged or broken during use, it should be replaced immediately);

It must be replaced immediately when shown in the figure below.



e. Brake inspection:

After the machine is used for every 20 hours, carry out 1.1 times the dynamic load and 1.25 times the static load test to check whether the brake is functioning normally. If there is a decline or the brake does not work, the relevant parts should be replaced in time;

f. Check whether the hook is cracked or deformed before use, and replace the hook in time if it appears;

Use Environment

1. The working environment temperature of the Brushless DC Hoist should be 5-35°C, the altitude should be lower than 1000M; the environmental humidity should be less than 65%.
2. The temperature of transportation and storage may be between 5°C and 30°C, and the environment humidity is less than 65% in a dry environment.
3. The Brushless DC Hoist is equipped with a temperature control device. When working for a long time, the motor may stop. It will automatically restart after cooling down.

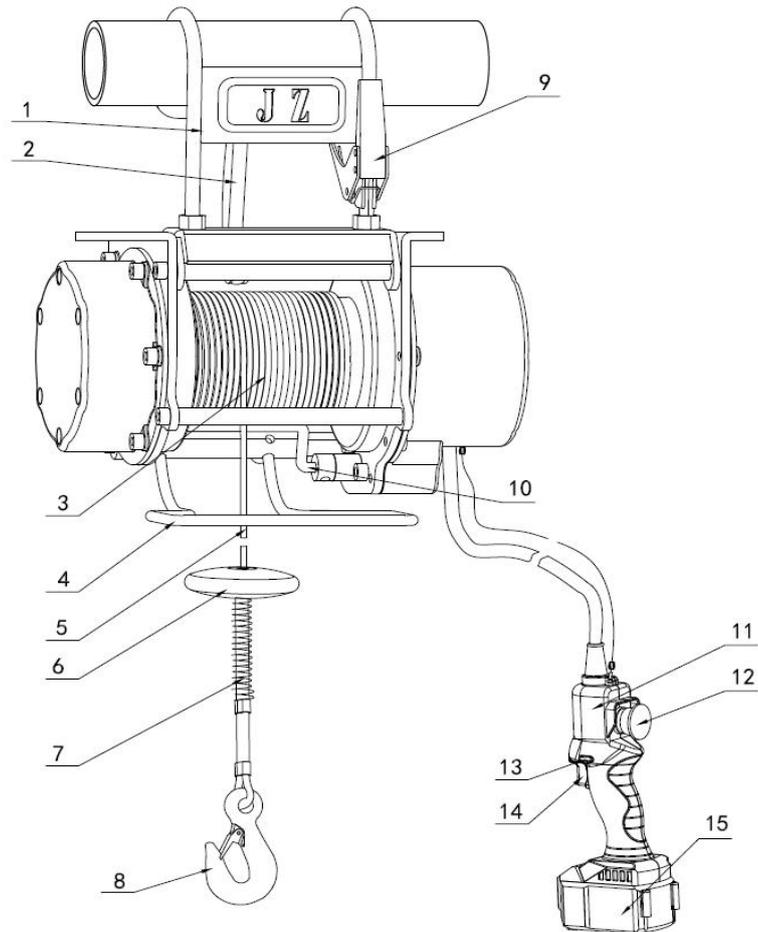
III. Applications

Brushless DC Hoist adopts brushless DC motor design, beautiful and high-end appearance, and light to carry; it is safe and reliable to use, fast installation, easy to operate, sturdy and durable, and a new type of lifting product with long wire rope service life.

The lifting motor adopts 18V DC brushless motor, which can be equipped with 4.0Ah/2.0Ah 18V battery pack; it is the most ideal professional light lifting tool for material transportation, handling, loading and unloading in any kind of construction site, and it is also applicable. It is used for handling and lifting works in factories, warehouses, docks, truck beds, homes.

This product has applied for Invention Patents and Utility Model Patents at China and Abroad.

IV. Layout



1. Hanging hook	2. Protection hook	3. Rope drum assembly	4. Upper limit lever
5. Wire rope	6. Rope block	7. Buffer spring	8. Load hook
9. Protection buckle	10. Lower limit lever	11. Control handle	12. Emergency stop switch
13. Direction button	14. Start switch	15. Battery pack	

1. Hanging hook: the new snap-in type Hanging hook provides higher safety, quick installation, and can be operated by one person.

2. Protective hook: to prevent the product from shaking during the lifting process, stabilize the center of gravity when the machine is working, and effectively prevent the machine from falling off.

3. Rope drum assembly: including rope drum, wire rope, rope block, buffer spring and load hook. The motor is built into the rope drum assembly; the outer diameter of the rope drum is increased, which facilitates the neat arrangement of the wire ropes, reduces the winding, squeezing, and deformation of the wire rope during the lifting process, and improves the service life of the wire rope.

4. Upper limit lever: When the loads up-rising, and the rope block touches the position of the upper limit lever, it causes the limit switch to disconnect the circuit and stop the machine to ensure safe operation.

5. Wire rope: It is anti-twisting steel wire rope. There is a red painting sign of last 2.5 laps at the end of winding, which indicates that the rope must stop at this position and stop continuing to pull out.

6. Rope block: Keep a safe distance from the end of the hook, avoid messing up the wire rope when

there is no lifting loads, contact the upper limit lever when it is lifted to a certain position and stop in advance when the rope is rewound.

7. Buffer spring: it can effectively prevent the loads from continuing to rise when the rope block touches the upper limit lever.

8. Load hook: Used to connect with heavy objects when lifting vertically.

9. Protection buckle: After the protection buckle is toggled during the suspension installation process, the hanging hook can be properly installed on the fixed pipe to prevent the machine from falling off the fixed pipe when failing to buckle the protection hook.

10. Lower limit lever: After the heavy object is lowered, when the wire rope is released to the last 2.5 laps to touch the position of the lower limit mechanism, make the limit switch disconnect the circuit and stop the machine to prevent the wire rope from being wound in reverse.

11. Control handle: Including emergency stop switches, handles, direction paddles, start switches, and battery packs.

12. Emergency stop switch: Emergency brake switch for stopping the machine in an emergency.

13. Direction button: Used to switch wire rope out/in (forward/reverse).

14. Start switch: Used to press and hold when supply power to the machine.

15. Battery pack: Motor power supply, 2Ah and 4Ah is optional. Press the battery pack capacity display button, and the battery capacity can be checked through the LED light.

V. Specifications

Model	YT-JZ-DC200
Power supply	DC 18V, 2Ah or 4Ah
Power	320W
Rated lifting capacity	200kg
Rope length	12m
Lifting speed	4m/min
Rope diameter	3.5 mm
Nominal rigidity of rope	1870N/mm ²
Duty classification	A2 (16000 full load cycles)
Work duty	ED 40%
Insulation class	B
Protection level	IP23
Net weight of single machine	10kg
Sound pressure level (SPL)	71 dB(A)

The SPL values stated here only indicate the loudness emitted by this machine. Whether the operator is required to wear hearing protection can't be determined here. This depends on how much noise reaches the ear of the operator. And this, among other things, depends on the existing ambient conditions (such as other sources of noise nearby). Even though it may not be explicitly required, it is in your own interest to always wear hearing protection when operating this machine.

(SPL) A-weighted emission sound pressure level was measured according EN ISO 11201.

The test cycles and measurements were repeated at least three times, the test result being the arithmetic average value. Hoists are primarily integrated in cranes.

The A-weighted emission sound pressure level was measured at a distance of 1 m from motor.

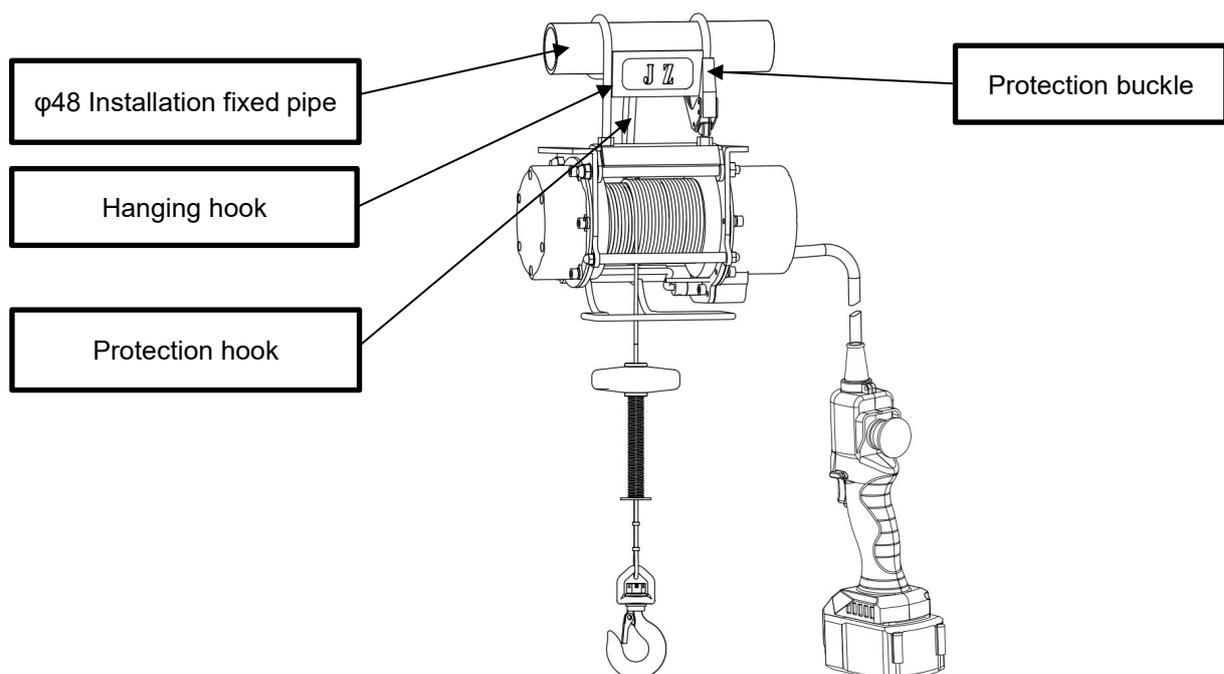
Work duty ED:40%: ED:40% =Intermittent mode without influencing the starting process.

This means that the maximum operating period over a time of 10 minutes is 40% (work 4.0 minutes, rest 6 minutes).

VI. Installation and Preparing

1. After opening the packaging, inspect whether the accessories and spare parts are consistent with the instructions, whether they are bruised or damaged, whether the wiring is off, whether the motor is exposed to rain, water, etc., If it is exposed to rain or water, it should be dried before to use.
2. Installation and fixing of Hanging hook:
 - a, Open the Protection hook out of the Hanging hook;
 - b, Flipping the protection buckle, install the Hanging hook to the $\varnothing 48$ mounting fixed pipe to buckle, the fixed pipe is always held firmly in the Hanging hook;
 - c, Lightly hold the body of machine, and then snap the protective hook back to the fixing hole of the protection hook to complete the installation.

⚠ Attention: The size of the Installation fixed pipe must meet the requirements of $\varnothing 48$ with a wall- thickness greater than 3mm; $\varnothing 48$ fixed pipe should be installed in the corresponding workplace according to the user's needs, but the $\varnothing 48$ fixed pipe must be installed firmly, can withstand the load-bearing gravity of the long-term rated lifting capacity. (As shown below)



3. When the wire rope is damaged and needs to be replaced during use, the diameter and safety

factor of the new-used wire rope must meet the manufacturer's standards.

4. This type of Brushless DC Hoist uses DC lithium batteries for power supply, and its rated voltage is 18V. The battery pack is charged when used for the first time:

a, Take out the charger and connect the charger to a standard 110-240 volt socket; a red light should appear on the charger.

⚠ Note: Before connecting the battery pack, always connect the charger to a standard 110-240 volt outlet.

b, Insert the battery pack fully into the charger slot until you hear a click or see the battery button switch back to a flat position.

c, Charge the battery pack until the light on the charger turns steady green. (Depending on the capacity of the battery pack, the charging time generally takes 2-4 hours).

d, Pull out the charging plug of the charger from the socket, disconnect the power supply, and then press the battery pack button to remove the battery pack. Disconnect the battery pack from the charger.

e, Press the battery pack capacity display button, and check the battery pack capacity through the LED light.

⚠ Note: After charging, do not leave the battery pack on the charger. Unplug the charger from the socket, and then remove the battery pack. The battery pack must be fully charged before the first use.

5. The battery pack is installed on the control handle before power on and use:

a, Hold the control handle and rotate the emergency stop switch to open and in the on condition;

b, After pressing the left direction button to the end, keep pressing the start switch to raise;

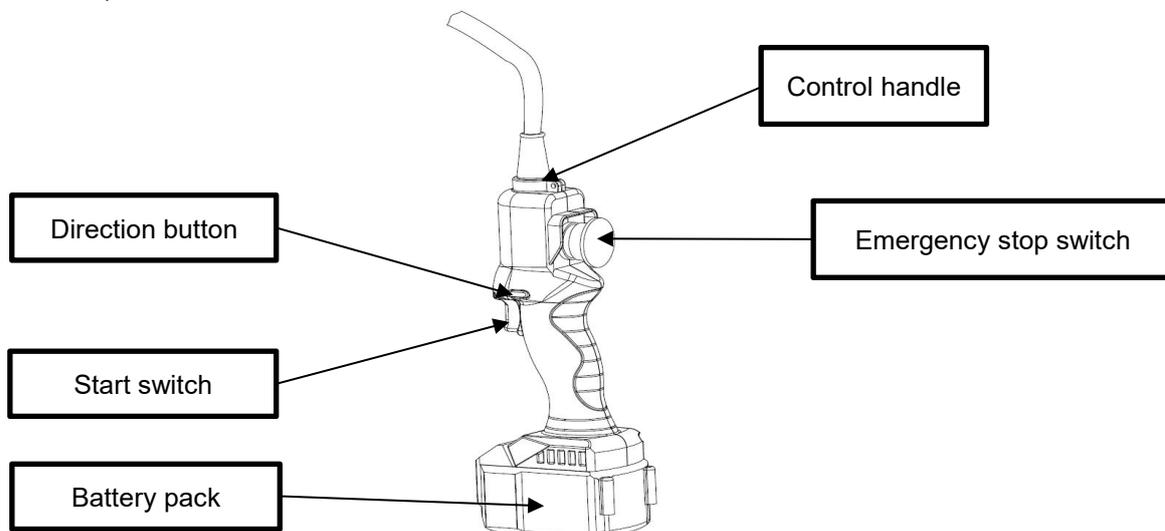
c, On the contrary, after pressing the right direction button to the end, keep pressing the start switch to descend;

d, Pay attention to the upward and downward arrows on the direction button;

e, When the Directional button is in the middle position, the upward and downward arrows can not be seen, the start switch can not be pressed down and the machine will not work.

⚠ Note: Carry out no-load lifting test first, confirm that the lifting is reliable and the braking is flexible before loading.

(The control handle is as shown below)



6. The Brushless DC Hoist has an overheating protection device. If it stops due to overheating, it can be operated after the motor has cooled to a certain temperature. Therefore, in the case of lifting with loads, should pay attention to the lifting switch not to jog too frequently, so as not to damage the motor.

VII. Trouble shootin

Common Faults	Main Cause	Troubleshooting Method
Hand press start switch The motor does not rotate	<ol style="list-style-type: none"> 1. The power is not turned on 2. Wiring disconnected or loose 3. Switch failure 4. The direction paddle is in the middle position 5. The limiter is not reset or the travel switch fails 6. In the thermal protection state 	<ol style="list-style-type: none"> 1. Turn on the power (insert the battery pack, turn on the emergency stop switch) 2. Check the wiring repair 3. Repair or exchange the switch 4. Toggle the direction paddle 5. Check the limiter and exchange the travel switch 6. Wait for it to cool before turning on or adjust the heat exchanger protector
Hand press start switch The motor is noisy, Can't lift the load	<ol style="list-style-type: none"> 1. The battery pack voltage is too low 2. The driver board is damaged 3. Damaged components 	<ol style="list-style-type: none"> 1. Check whether the battery pack is full and replace the battery pack 2. Send qualified personnel to repair 3. Send qualified personnel to repair
Not after power failure Braking or sliding Too much	<ol style="list-style-type: none"> 1. The driver board is damaged 2. Gear wear 3. Damaged components 4. Motor damage 	Send qualified personnel to repair
noise Abnormal increase	<ol style="list-style-type: none"> 1. Poor lubrication 2. Gear bearing damage after long-term use 3. Poor assembly or bumps 	<ol style="list-style-type: none"> 1. Add enough grease 2. Check and exchange gears or bearings 3. Re-check the assembly to repair the bumped part
Stopper malfunction	<ol style="list-style-type: none"> 1. The limit travel switch fails 2. Stopper block 	<ol style="list-style-type: none"> 1. Repair or exchange the limit switch 2. Check and repair the stopper

VIII. Maintenance

8.1 Cleaning

1). Keep all safety equipment, vents and motor housing as free of dust and dirt as possible.

Wipe the equipment with a clean cloth or blow with compressed air at low pressure.

2). We recommend that you clean the equipment immediately after each use.

3). Clean the equipment regularly with a damp cloth and soft soap. Do not use cleaners or solvents, which may attack the plastic parts of the device. Make sure that no water seeps into the equipment.

8.2 Repair

important. Before starting any maintenance work, always make sure that the Brushless DC Hoist is not connected to the power source.

In the following situation: One cycle is a rising and falling movement of the load. Periodic inspection refers to inspection after 100 cycles.

1). Regularly check whether the upper limit switch and lower limit switch on the Brushless DC Hoist are working properly. The test is performed as follows: When the counterweight on the wire rope reaches the maximum height, it touches the upper limit mechanism, and the upper limit mechanism touches the limit button in the controller mechanism, and the motor must stop. When the 2 half turns of the wire rope tail touches the button of the lower limit mechanism, the motor must stop. (No load test).

2). Check the power control cables regularly.

3). Regularly check whether each mechanical part is loose.

4). It must be checked every 30 cycles to see if the wire rope is in good condition. If it is damaged, it must be replaced with the steel wire rope specified in the technical data. It must be confirmed firmly before use.

5). Check whether the limit frame, limit tension spring and limit piece screws are tightened every 1000 cycles.

6). Check whether the hook, counterweight and wire rope are in good condition every 600 cycles. It is required that the hook is intact and the wire rope is not tangled messily.

7). Before using the Brushless DC Hoist, check whether the emergency stop switch and button on the control handle are in good working condition.

8). Check the brake system every 1000 cycles. If the motor emits abnormal noise or cannot increase the rated load, the brake system may need to be overhauled:

-Replace damaged or worn parts, and store related maintenance documents in a safe place.

-If there is any irregular maintenance work, please contact an authorized repair center.

8.3 Storage

Store the equipment and accessories out of the reach of children, in a cool and dry place. The ideal storage temperature is between 5°C and 30°C. Store the Brushless DC Hoist in its original packaging.

Battery pack storage

Short-term storage: If the lithium battery is used for a short time (such as within 6 months), when the original manufacturer of the battery pack is charged, store the battery in a dry, non-corrosive gas, with a temperature of 5°C-30°C, and an ambient humidity of less than 65%. The temperature and humidity above or below this % will cause the metal parts of the battery to rust or the battery

will leak.

Long-term storage: If the lithium battery is not used for a long time (for example more than 6 months), it should be charged with 50% to 70% of the power, and be taken out of the hoist and stored in a dry and cool environment, and the battery pack should be charged every 3 months to avoid long storage time and low power of the battery pack due to self-discharge, causing irreversible capacity loss.

The self-discharge of the lithium battery is affected by the ambient temperature and humidity. High temperature and humidity will accelerate the self-discharge of the battery. It is recommended to store the battery in a dry environment with an ambient humidity of less than 65%.

8.4 Disposal and recycling

The device is provided with packaging to prevent it from being damaged during transportation. This kind of packaging is raw material, so it can be reused or returned to the raw material system.

The unit and its accessories are made of various types of materials, such as metal and plastic, and battery packs.

Defective parts must be treated as special waste. Ask your dealer or your local council.

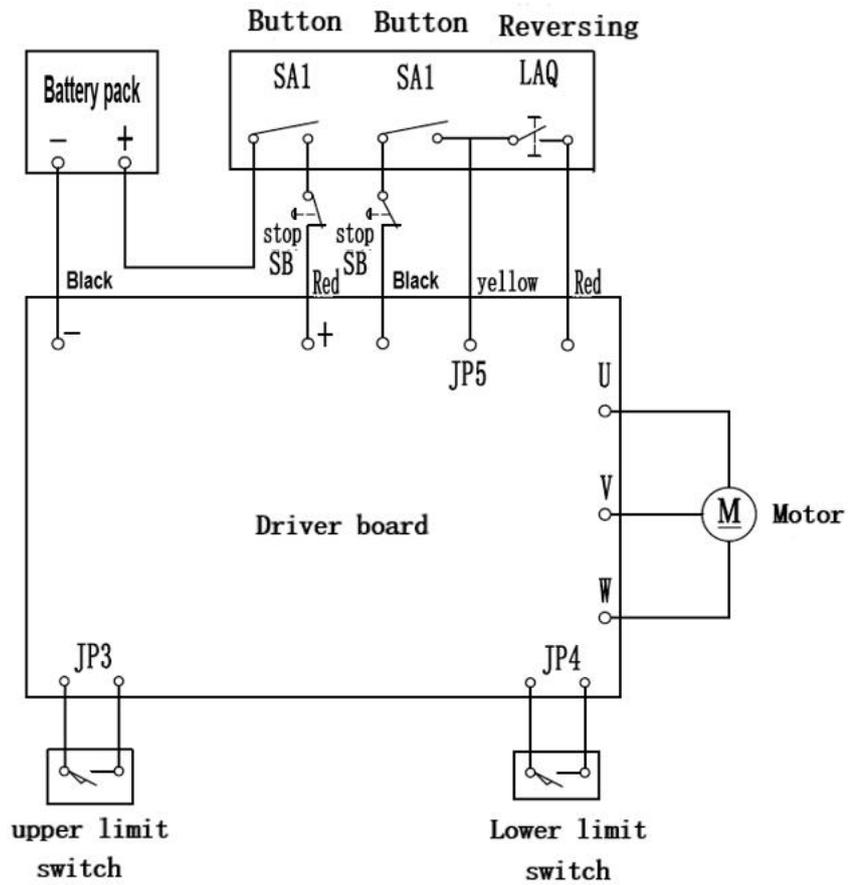


Do not put any power tools in household garbage.

In order to comply with the European Directive 2012/19/EV on old electrical and electronic equipment and its implementation in national laws, old power tools must be separated from other waste and disposed of in an environmentally friendly way. Pass to a recycle bin.

Demand for recycling and replacing recycled electrical equipment:

As an alternative to returning electrical equipment, the owners must cooperate to ensure that the equipment is properly recycled if ownership is relinquished. This can also be done by handing over the used equipment to a return center, which will dispose of it in accordance with national commercial and industrial waste management legislation. This does not apply to accessories and auxiliary equipment, excluding any electrical components contained in the accompanying equipment.



Electrical diagram

Packing List

Whole machine	1 set
Operation manual	1 set
Battery pack, charger (optional)	1 set



EC Declaration of Conformity

according to the Machinery Directive 2006/42/EC

For the following equipment: :

Product : Brushless DC Hoist

Type Designation /Trademark : **YT-JZ-DC200**

Manufacturers Name : Zhejiang Yongtian Machinery Manufacturing Co., Ltd.

Manufacturers Address : Mingyuan North Road, hardware Technological
Industrial District, Yongkang, Zhejiang 321300,
P. R. China

Refer to in this declaration conforms with the following directive(s):

EC Directive of Machinery Directive 2006/42/EC

EC Directive of Electromagnetic Compatibility (EMC) 2014/30/EU

Reference to the harmonised standards:

- EN 14492-2: 2019
- EN 60204-32: 2008

- EN 55014-1: 2017
- EN 55014-2: 2015
- EN IEC 61000-3-2: 2019
- EN 61000-3-3: 2013

Person responsible for making this declaration

Name ,Surname : WENGTING

Position/ Title : Chief Technical Engineer

Yongkang
(place)

Sept 20, 2021
(date)

(company stamp and legal signature)

GUARANTEE CERTIFICATE

Dear Customer,

All of our products undergo strict quality checks to ensure that they reach you in perfect condition. In the unlikely event that your device develops a fault, please contact our service department at the address shown on this guarantee card. Of course, if you would prefer to call us then we are also happy to offer our assistance under the service number printed below. Please note the following terms under which guarantee claims can be made:

1. These guarantee terms cover additional guarantee rights and do not affect your statutory warranty rights. We do not charge you for this guarantee.

2. Our guarantee only covers problems caused by material or manufacturing defects, and it is restricted to the rectification of these defects or replacement of the device. Please note that our devices have not been designed for use in commercial, trade or industrial applications. Consequently, the guarantee is invalidated if the equipment is used in commercial, trade or industrial applications or for other equivalent activities. The following are also excluded from our guarantee: compensation for transport damage, damage caused by failure to comply with the installation/assembly instructions or damage caused by unprofessional installation, failure to comply with the operating instructions (e.g. connection to the wrong mains voltage or current type), misuse or inappropriate use (such as overloading of the device or use of non-approved tools or accessories), failure to comply with the maintenance and safety regulations, ingress of foreign bodies into the device (e.g. sand, stones or dust), effects of force or external influences (e.g. damage caused by the device being dropped) and normal wear resulting from proper operation of the device. This applies in particular to rechargeable batteries for which we nevertheless issue a guarantee period of 12 months.

The guarantee is rendered null and void if any attempt is made to tamper with the device.

3. The guarantee is valid for a period of 2 years starting from the purchase date of the device. Guarantee claims should be submitted before the end of the guarantee period within two weeks of the defect being noticed. No guarantee claims will be accepted after the end of the guarantee period. The original guarantee period remains applicable to the device even if repairs are carried out or parts are replaced. In such cases, the work performed or parts fitted will not result in an extension of the guarantee period, and no new guarantee will become active for the work performed or parts fitted. This also applies when an on-site service is used.

4. In order to assert your guarantee claim, please send your defective device postage-free to the address shown below. Please enclose either the original or a copy of your sales receipt or another dated proof of purchase. Please keep your sales receipt in a safe place, as it is your proof of purchase. It would help us if you could describe the nature of the problem in as much detail as possible. If the defect is covered by our guarantee then your device will either be repaired immediately and returned to you, or we will send you a new device.

Of course, we are also happy offer a chargeable repair service for any defects which are not covered by the scope of this guarantee or for units which are no longer covered. To take advantage of this service, please send the device to our service address.

Service address contact information

Manufacturers Name : Zhejiang Yongtian Machinery Manufacturing Co., Ltd.
Manufacturers Address : Mingyuan North Road, hardware Technological Industrial District, Yongkang, Zhejiang 321300, P. R. China
Contact phone number : 400-826-8170