DPARK

CP-CPG425

Product Catalog

0 —*Safety Precautions*

In order to ensure your operation safety, please operate in strict accordance with the provisions of this manual

1. It is strictly forbidden to open the door or lid of the box when the barrier is working, so as to avoid personal danger accidents.

2. The shell of the box must be connected to the protective ground to prevent inductive electric shock.

3. It is strictly forbidden to stand or walk under the arm or place objects under the arm.

4. When the product leaves the factory, the brake arm and the spring have been matched to the balance state, and the length and weight of the brake arm shall not be increased or decreased at will, so as to avoid the danger of the brake arm losing balance.

1.Product Description

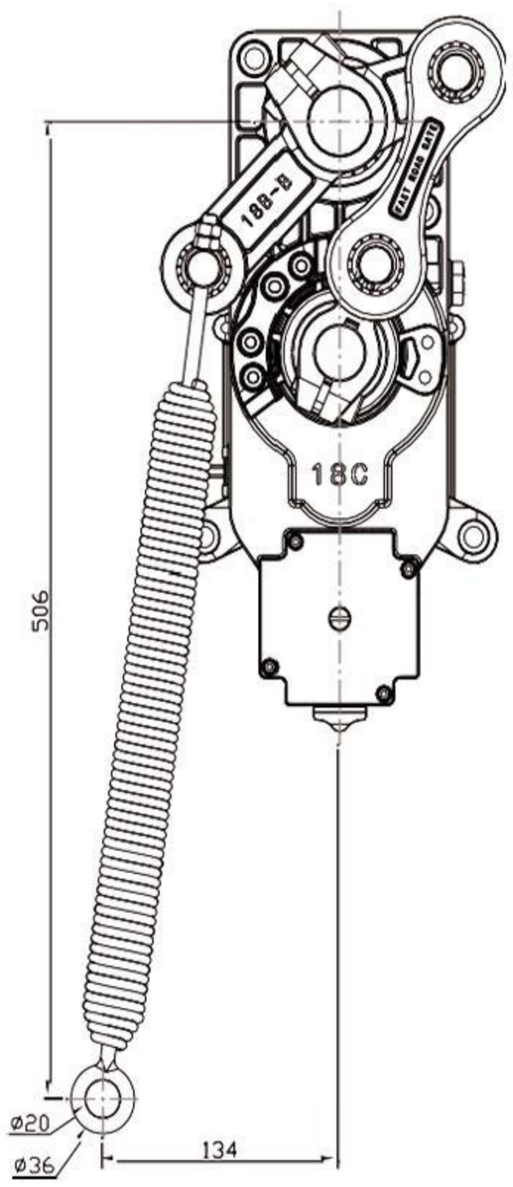
Thank you for purchasing the company's brushless barrier products, this product is a typical mechatronics product, which is characterized by exquisite appearance, simple installation, long life, and small steady-state speed error. The latest reducer, smooth operation, planetary gear transmission efficiency is higher, high stability, more and more respected by the market, using the latest mold design technology, mold die-casting manufacturing technology, brushless control speed regulation technology, left and right can be quickly interchanged, reliable quality, more convenient to use, fast and stable landing arm, easy maintenance.

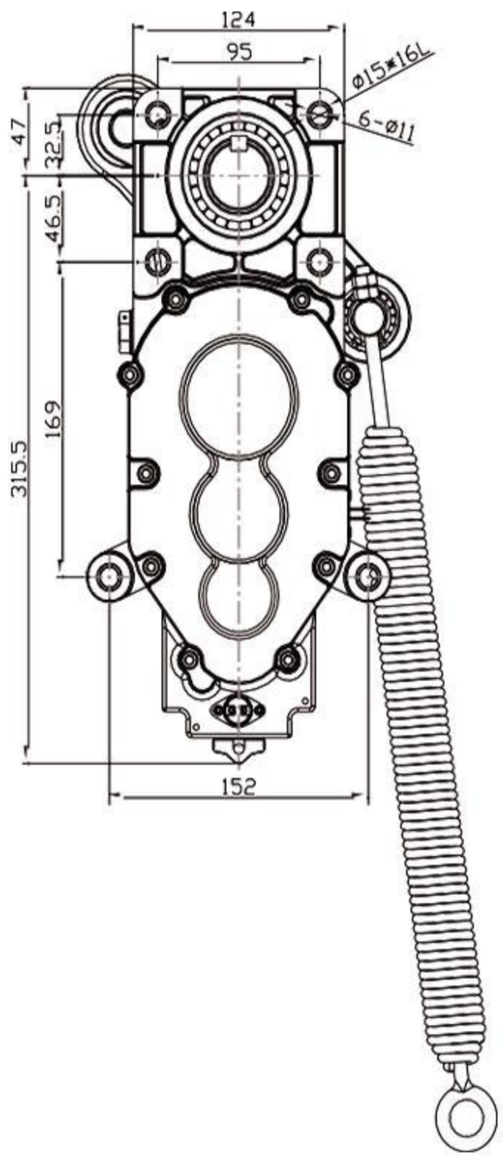
2.Brake arm type, length and running speed parameters

- **Safety:**
  24V DC power supply, to ensure personal safety.
- **Energy-saving:**
  the static power is less than 2 watts, can be connected to the maximu power of 200W motor;
- **Adjustable speed:**
  the lever drop lever speed is adjusted independently.
- **Stable work:**
  multi-stage speed design, so that the working state performance, stable.
- **Quiet:**
  the working noise is less than 50 db;
- **Multiple protections:**
  motor overcurrent,overload, short circuit protection, motor fault protection, power reverse protection;
- Support for external remote control input;
- Support for various parameters can be set;
- Support light to open the advertising gate lights;
- Support wind, frost, rust and other functions;
- Support for multiple relay output modes.

gate arm type	Arm length	Landing arm time
straight arm	6m≤L＜5m	5sec
	5m≤L＜4.5m	4sec
	4.5m≤L＜3m	3sec
	3m≤L＜2.5m	1.2sec
90 ° curved arm	L≥5m	5sec
180 ° curved arm	L≥4.5m	5sec
Two fence arm	4.5m≤L≤4m	6sec
	4m≤L≤3m	3sec
Three fence arm	4m≤L≤3.5m	6sec

—3.Technical parameters





1. Operating temperature of the movement: -30℃ ~ + 60℃
2. Power Supply: 24V DC-10 Amp, 50/60 Hz
3. Running speed: 0.8 seconds-6 seconds (adjustable)
4. Rated power: 150W
5. Drive mode: brushless motor
6. relative humidity: 85%
7. Remote control distance: 50M (open and fine weather)
8. Protection level: IP 65
9. No-load rotation speed of the motor: 1,800 r / min
10. Max. rod length: 3M-6M
11. deceleration ratio: 1:50

—*4.Main functions*

1. The take-off and landing speed can be adjusted for 1.2-4 seconds and 3-8 seconds
2. the left and right can be quickly exchanged
3. power outage manual lift rod, call automatically reset
4. curved arm three-link movement structure, smooth take-off and fall rod
5. wireless remote control lever, lever
6. Return in resistance (adjustable strength)
7. infrared anti-protection (protection device)
8. support the sense of failure
9. Connect on and off control signal of parking lot system (switch signal)
10. Traffic light interface (2A 24V / 220VAC, less than 40W traffic light)
11. Provide the limit state signal to the parking lot system (output COM / NO /NC)
12. Delay-lapse lever drop function
13. RS 485 or CAN network communication interface (no additional module isrequired)

14. Count the interface
15. 24V battery interface (solar charging) (optional)
16. Power off starting lever (add power storage module) (optional)
17. Anti-collision alarm device (optional)
18. the sense of often open often closed signal selection
19. one car, one pole (the fee evasion function)
20. fire protection special signal input

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—5.Installation,debugging and use

I. The installation of the equipment part

1. Select appropriate sluice gates according to the specific situation of the site, and fix the machine on the ground with expansion bolts.

2. when the location is determined, according to the site situation to do a good job of the gate foundation, non-concrete ground to do the cement foundation in advance.

II. After the gate is fixed, the power supply is connected, and you need

to learn the horizontal and vertical position manually. You can use the keys on the remote control or controller, or use the station control button or loop detector signal. When learning,
the horizontal and vertical are in no order, and the initial learning speed is slower than the normal operation.

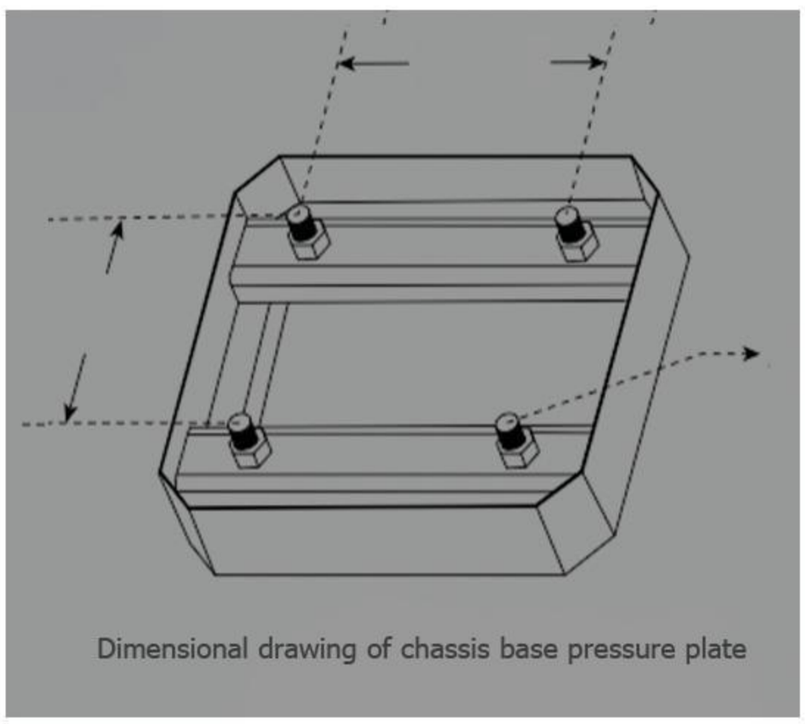
After the study is completed, it can run normally, or further debug other parameters to meet the various needs of use. The controller parameters and the wiring mode are not explained in detail here, please refer to the Controller Manual. needs of use. The controller parameters and the wiring mode are not explained in detail here, please refer to the Controller Manual.

III. Electrical installation and wiring diagram

1. the machine has finished the internal wiring, do not change, only need to access 220V power supply and protection ground wire can work.

2. Loop detector / radar interface: support external loop detector and radar. When using external loop detector, only the switch signal output by Loop detector needs to be connected.

3. Parking lot system interface wire control interface: connecting the switch signal from the system can control the gate through this interface.



Dimensional drawing of chassis base pressure plate

⚙—6-1. Controller parameter settings

You can press the Menu button for 3 seconds, and the LED will display the P-XX. Select the menu item by short pressing or long pressing "on / +" and "off / -", short pressing to add one or subtract one once, and press long to add or subtract continuously. Press the Menu key again to enter the specified setting, and press the Stop / Cancel key to return to the previous level or exit the setting. After setting the specified parameters is completed, you must press Menu to confirm it to take effect. The parameter set by pressing the Stop / Cancel key will not take effect. If there is no button within 60 seconds, the buzzer on the control board will chirp, exit the setting state and return to the normal operating state.

menu	function	Windows default	scope	function declaration
P-00	The arm speed	60	10-200	The larger the value, the faster the speed, the smaller the value, the slower the speed;when set up to 200 The P-72 can be increased when the speed is required.(When P63 is 0 or 1, over 100, as 100; more than 100 valid when P63 is set to 2)
P-01	Drop arm speed	60	10-200	The larger the value, the faster the speed, the smaller the value, the slower the speed; when the 200 still cannot reach the desired speed, the P-72 can be increased.(When P63 is 0 or 1, over 100, as 100; more than 100 valid when P63 is set to 2)
P-02	The starting arm slows down the Angle	45	10-90	Use to set the position to start deceleration during the lever. In the horizontal position and 90 degrees in the vertical position. This parameter indicates the onset of deceleration when driven to this angle.
P-03	Start arm end speed	10	1-80	At this speed, too small will lead to open not in place, too large will lead to shaking.
P-04	Drop arm deceleration angle	70	0-80	Use to set the position to start deceleration during the drop process. In the horizontal position and 90 degrees in the vertical position. This parameter indicates the start of the deceleration when the gate lever falls at this angle.
P-05	Drop arm end speed	15	1-80	At this speed to end the drop arm, too small will lead to close not in place, too large will lead to shaking. If the P-26 command sets the low fall lever angle and is in a valid range, operate at that speed in the low speed constant zone.
P-06	Boot acceleration time	60	0-255	Use to set the position to start deceleration during the drop process. In the horizontal position and 90 degrees in the vertical position. This parameter indicates the start of the deceleration when the gate lever falls at this angle.
P-07	Drop-arm acceleration time	50	0-255	The time required to start the drop speed set to the P-01 (the greater the value, the longer the time).(Unit: 0.01 seconds)
P-06	Boot acceleration time	60	0-255	Use to set the position to start deceleration during the drop process. In the horizontal position and 90 degrees in the vertical position. This parameter indicates the start of the deceleration when the gate lever falls at this angle.
P-07	Drop-arm acceleration time	50	0-255	The time required to start the drop speed set to the P-01 (the greater the value, the longer the time).(Unit: 0.01 seconds)
P-08	Horizontal position fine-tuning	10	0-255	The distance between the arm horizontal position and the horizontal mechanical limit,the farther the value is, and vice versa. When the gate completes self-test and is in place, the horizontal angle of the gate can be updated in real time with the set value

—6-2. Controller parameter settings

menu	function	Windows default	scope	function declaration
P-09	Vertical position fine-tuning	10	0-255	The distance between the vertical position and the vertical mechanical limit, the larger the value, and vice versa. When the brake is modified after the self-test and is in place, the vertical Angle of the gate can be updated in real time with the set value.
P-10	Motor type	0	0-3	Value range: 0-3; default: 1; due to the Hall polarity of the motor, the deceleration series of the gate movement, and the gate is left and right. So this parameter is used for compatible with various types of motors and gates. 0: motor positive polarity, reducer positive polarity 1: motor positive polarity, reducer negative polarity 2: motor negative polarity, reducer positive polarity 3: motor negative polarity, reducer negative polarity
P-11	Remote control learning style	0	0-1	0: Press the switch in turn to stop learning. 1: Press any one to finish learning
P-12	Remote control learning	0	0-50	Remote control learning: into the P-12 will display the current number of save remote control, in accordance with the order press the remote control switch stop learning, pay attention to press until the board "drop" loosen press a button, until the board long "drop" sound or digital tube display number up after learning to complete, can then learn the next or cancel back. Remote control delete: Under this menu, press "+" or "-" to modify the value of the learned remote control and click "menu key" to delete the learned
P-13	Remote control of the fleet mode	0	0-1	0: Normal remote control mode; 1: Remote control "open" into the team mode, will not handle the ground sensor signal before manually pressing the drop lever; (Temporary enter Team Mode: When the gate is 0, press the remote control button for more than 5 seconds, then enter the team mode temporarily, and the buzzer will sing for 2 seconds. Exit from fleet mode and the gate is closed)
P-14	Trigger time of the blocked rebound	2	1-80	How long to judge is obstacles.(In unit: 0.05 seconds)
P-15	Encounter resistance to the rebound strength	30	1-100	How much resistance is resistance. The rebound condition is the resistance set by P-1 5 and the P-1 4 time and then the lever rebound.
P-16	Encounter resistance rebound Angle	2	0-90	When the arm is lower than this option Angle, there will be no resistance rebound. 0 is the closed secondary function.
P-17	Learning limit, bit speed	10	0-255	Set the speed of finding the upper limit and the lower limit. After entering the menu, the first set is the speed of finding the upper limit. The digital tube shows "1-XX", and XX means the speed of finding the upper limit. You can adjust the speed by pressing "on / +" and "off / -". After the upper limit bit speed is set, press the "menu" button, the

—6-3. Controller parameter settings

menu	function	Windows default	scope	function declaration
P-18	Look for the limit, the bit mode	0	0-2	0: Look for double limits.1: Look for the upper limit level.2: Look for the lower limit level.
P-19	Manual learning of the upper limit bit	not have	not have	After entering this setting, the digital tube displays L-0 0, the pole automatically starts in place to stop, displays L-0 1, the operation is the same as P-2 1, looking for vertical and horizontal limit, learning the level will automatically return to the setting page, indicating success, and then set P-1 8 to 1 can be used.
P-20	Manual learning lower limit level	not have	not have	Consistent with P-1 9, just the other way around. Enter the setting display L-0 0, automatically find the lower limit, stop, display L-0 1, the user manually find the horizontal and vertical position, press the first time to determine the horizontal position, display L-0 2, the second vertical position and return to the setting page, and then set P-1 8 to 2 to use.
P-21	Manual learning of the upper and lower bounds	not have	not have	After entering this setting, the digital tube displays L-0 0, the gate automatically drops the lever first, displays L-0 1 when in place, stops when the automatic lever is in place, and displays L-0 2. At this time, press the lever or the pole will be the rod or the lever, release will stop, to the mechanical limit will be alarm. Users can adjust the position by themselves to press the menu to learn a limit, the first time press the menu is vertical limit, the digital tube display L-0 3, the second time is the horizontal limit, press the second time will automatically return to the setting page, indicating the uccess of learning, this function set also need P-1 8 set 0.
P-22	Start-arm rebound buffer time	80	10-255	The buffer time from the starting arm to the falling arm is too short to appear and the instantaneous current is too large.(Unit: 0.0 1 Seconds)
P-23	Trigger time of the blocked rebound	2	1-80	The buffer time from the falling lever to the starting lever is too short to appear and the instantaneous current is too large.(Unit: 0.0 1 seconds)
P-24	Stop buffer time	100	10-255	From the starting arm or the falling arm press to stop, the motor from the movement to stop the time, the assembly stop is very slow, very stable, the time is too short easy to appear instantaneous current is too large.(Unit: 0.0 1 Seconds)
P-25	Starlever deceleration end angle	90	45-90	During the starting motion, the arm will accelerate to P-0 0, then start deceleration at P-0 2, at this option stop deceleration and enter constant-motion until the end of the lever. digital tube displays "2-XX", then XX indicates the speed of finding the lower limit bit. Also, adjust the speed by pressing on / + and Off / -. Finally, after the limit speed is set, press the Menu key to save the parameters. If you press the Stop / Cancel key-during the setting process, the set parameter is invalid.
P-26	Learning limit, bit speed	0	45-90	During the lever movement, the lever accelerates to P-0 1, then starts deceleration at P-04. At this option, stop the deceleration and enter the-constant motion until the end of the lever.

—6-4. Controller parameter settings

menu	function	Windows default	scope	function declaration
P-27	Anti-smash function	1	1-6	Whether the anti-smash port signal is effective, 0: invalid, trigger anti-smash signal can not afford arm, 1: effective, the falling rod process trigger anti-smash signal start arm, 2: anti-smash interface reuse for "open" interface function, 3: anti-smash interface reuse for "off" interface function, 4: anti-smash interface reuse for the ground sense interface function (. After the smash interface reuse function, the original interface of this function is invalid). 5: The anti-smashing terminal is connected to the radar to distinguish the people and vehicles (the radar trigger is effective after receiving the ground sensing signal, but the radar trigger without receiving the ground sensing signal is invalid). 6:anti-smash interface reuse is "open", interface function, and keep the original "open" interface effective.
P-28	Lock power value	8	0-21, 255	When the motor stops in the non-mechanical lock area, because there is no mechanical lock, the spring elasticity will pull up the arm. This function locks the output control of the controller, which will cause the motor and the board to get hot. It is suggested to set it according to the actual situation, not too large. When the value is set to 255, the automatic adaptive lock power is used.
P-29	Manual learning lower limit level	0	0-255	How long does the lock close when the arm is in place.(Unit: seconds) When the value is 255, keep the lock when in place, no Do timing.
P-30	Close and lock time	0	0-255	How long it takes to close the lock when the arm is in place.(Unit: seconds) When the value is 2 5 5, keep the lock when in place, no Do timing.
P-31	Start-arm rebound buffer time	0	0-20	If the motor is reversed for various reasons, lock the brake after how many turns.
P-32	No sense automatic drop time	0	0-255	No feeling arm automatically falling time, set to 0 means no feeling not automatically falling arm.(Unit: seconds)
P-33	Delayed lever time	2	0-255	How long does the ground sensor signal disappear after the drop bar, the default is 0.2 seconds.(In unit: 0.1 seconds)
P-34	Ground sensation count	1	0-4	0: Do not count the lever, pass the car lever.1: Count the starting bar signal, The maximum count value is 1, Self-subtract the count at triggering the ground sense, When the ground feeling disappears and the count is 0; 2: Count the starting bar signal, The maximum count value is 2, Self-subtract the count at triggering the ground sense, When the ground sense disappears and counts 0; 3: count the lever signal, The maximum count value is 3, Self-subtract the count at triggering the ground sense, When the ground sense
P-35	Ground sense does not detect the angle	10	0-45	When the arm angle is below this value, the ground signal will not be processed and the arm will fall directly.

—6-5. Controller parameter settings

menu	function	Windows default	scope	function declaration
P-36	To feel the frequency of the buzzer call	4	0-20	When the buzzer calls the frequency, 0 is closed, the bigger the number, the faster the call speed.
P-37	The ground signal triggers the judgment time	4	1-255	How long does the signal remain as triggered (. Unit: 0.01 seconds)
P-38	The loop detector signal effectively determines the timel	4	1-255	When the feeling hair, still trigger how long it is a real signal that a car (. Unit: 0.01 seconds)
P-42	Start arm first	0	0-250-80	0: All control signals have the same priority in any state.1: The highest priority and other signals are useless at the start.2: In the process of starting the lever, if the vehicle has passed the ground sense, start the drop rod immediately, without waiting until the gate is in place before the drop lever.50-80: During the lever process, if the vehicle has passed the ground before driving in place, the gate immediately starts the drop lever when driving to the angle of the set value.
P-43	The lever signal determines the time	5	1-255	How long the starting signal lasts is considered the effective starting signal.(In unit: 0.01 seconds)
P-44	Relayoutputmode	0	0-7	0: Passing light mode: close when the relay is in place, and break when the relay is in place 1: Advertising light mode: for the advertising gate, open / close the light of the advertising gate according to the external light sense.2: Ground sensing mode: close when lifting the rod, and disconnect when the relay is in place.3: Traffic light mode 1: often close the red light, often open the green light. After the switch is in place, the relay closes the green light, otherwise the relay is disconnected from the red light.4: Traffic light mode 2: often close the red light, often open the green light. The gate angle is greater than 60° and the relay closes the green light, otherwise the relay is disconnected from the red light.5: Traffic light mode 3: Close when the relay starts and disconnected when the pole falls.6: artificial pole report: the police relay is closed in place for later generations to lift the pole to more than 5 degrees closed relay, can be used to connect the alarm to achieve alarm.7: Pulse mode: close for 1 second when the relay is off in place.
P-45	Delayed lever time	not have	not have	A light intensity in the current environment, the smaller the brighter.
P-46	luminous sensitivity threshold	30	0-200	The current ambient light intensity is greater than this value and the P-44 related setting will output the relay signal
P-47	Lights time-lapse	10	0-255	Long delay output relay signal when the current illumination is greater than P-46.(Unit: seconds)

—6-6. Controller parameter settings

menu	function	Windows default	scope	function declaration
P-48	Lights delay	250	0-255	How long does the relay delay last when the current ambient light is lower than P-46.(Unit: seconds)
P-60	Restore default settings	0	0-255	This option has four functions: clear the remote control, partially restore the parameter backup data, partially restore the factory settings, and fully restore the factory settings. To prevent misoperation, you need to set a specific value before pressing the Menu key to complete the operation.5: empty the remote control 6: restore the parameter backup data (the remote control is not cleared) 10: restore the factory setting (remote control and motor type is not restored) 15: fully restore the factory Set-tings
P-63	Adaptive mode	0	0-2	0: General mode; 1: adaptive mode for initialized limit; 2: adaptive mode for both initialized limit and landing lever.
P-64	Gate start lever / droplever timeout time	20	6-40	0: All control signals have the same priority in any state.1: The highest priority and other signals are useless at the start.2: In the process of starting the lever, if the vehicle has passed the ground sense, start the drop rod immediately, without waiting until the gate is in place before the drop lever.50-80: During the lever process, if the vehicle has passed the ground before driving in place, the gate immediately starts the drop lever when driving to the angle of the set value.
P-65	Power-offautomatic rise/falllever voltage	0	0-21	0: Off; 1:21 trigger automatic start / fall lever voltage, this function shall be equipped with backup power supply and set with P-69 setting item, recommended to 15.
P-68	When the ground gate gate is suspended	0	0-1	0: When the ground sense is triggered in the process of falling rod, the gate automatically starts the rod; 1: When the ground sense is triggered in the process of falling rod, the gate stops at the current position (which can escape the cost to some extent).
P-69	Power-off automatic, operation function	1	0-4	Set the automatic operation option. When P-65 is set not 0, detect the processing method of the gate when the power supply voltage is lower than the set value of P-65; 0: not processing; 1: automatic lever; 2: auto-matic lever drop; 3: not when the gate is in place, not in the middle posi-tion; 4: not when the gate is in place, and the automatic low speed lever in the middle position.
P-72	power	75	20-100	Maxmaximum limit output power%
P-81	Adaptive mode learning the limit power	10	0-255	In adaptive mode, the learning limit maximum power is set; for some small power supplies during the learning limit, the parameter can be reduced if the power over-protection; for the poor spring balance, the learning limit up / fall lever motor torque is not enough, increase the parameter.

—7. Common misreporting

Error code	Cause of error
Err 0	After clearing the remote control and restoring factory settings, the correct validation value will indicate the Err 0 error.
Err 1	reserve
Err 2	The brake recoil voltage warning is too high, generally caused by poor spring matching and too fast speed, can be solved by matching the balance of spring heel arm and reducing the running speed. You can also increase the P-66 setting value Trigger threshold.
Err 3	Starting lever block, possible reasons: the gate spring is broken, the starting speed Small, the lever end speed is too small. The start speed and the start end speed can be increased.
Err 4	The blockage of the falling arm may be caused by: the gate spring being too tight, the gate arm not being hung, the falling arm speed or the ending speed of the falling arm being too small. Check if the spring is too tight, if the gate arm is hung, increase the speed of lowering the arm or the end speed of lowering the arm.
Err 5	Lifting timeout, due to lifting time exceeding 15 seconds. Can increase the lifting speed and lifting end speed.
Err 6	Arm drop timeout, due to arm drop time exceeding 15 seconds. Can increase the drop speed and drop end speed.
Err 8	Spare
Err 9	During the lifting process, there were situations where the spring broke, causing the motor to reverse

—8. Product maintenance and upkeep

1. Regularly clean the dust and debris on the surface of the box, and keep the surface of the barrier clean.

2. Check the fasteners for looseness and detachment once a month and tighten them in a timely manner.

3. After running 30000 times, check the balance status of the spring and readjust the balance.

4. Every six months, please have professionals inspect the wear and tear of easily worn parts and replace them in a timely manner.

5. The remote control distance is too short. Please check if the receiver is shielded by metal objects. Or the battery is low. The remote control distance is greatly affected by weather, and it is normal for the remote control distance to be shortened in harsh weather conditions such as rain, fog, wind, and snow.

9. Product after-sales service

1. 2-year free maintenance (brake lever and remote control are not covered by warranty);

2. Provide lifelong paid maintenance;

3. Lifetime technical support.

***The following situations are not within the scope of free maintenance (or replacement):**

1. If the user does not install according to the manufacturer's supporting service manual, resulting in product damage;

2. Unstable power supply, exceeding the voltage range specified by the system, and not complying with national safety electricity standards, resulting in product damage;

3. Damage to the appearance of the system due to improper installation and use by the user;

4. Damage to products caused by uncontrollable factors such as natural disasters;

5. Exceeding the warranty period;

6. Service items promised by non supporting manufacturers.