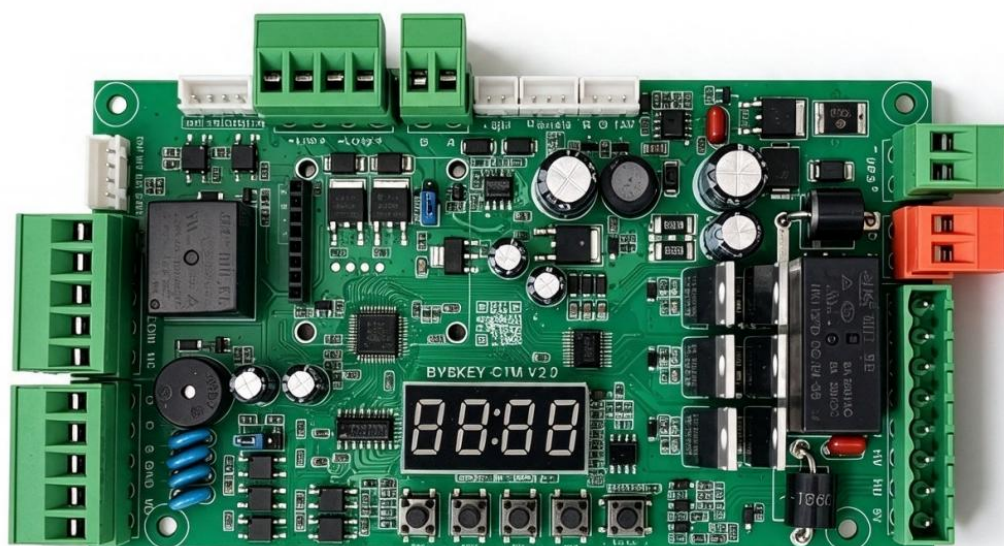


Sliding Door Operator Controller Manual



Version: 1.5

Safety Instructions:

The following describes the correct usage of the product and the precautions to prevent danger and property loss. Please read this manual carefully before using the device, follow it strictly during use, and keep it properly for future reference.

Operating Environment Requirements:

- Transport, use and store the device within the permitted humidity and temperature ranges.
- Do not allow any liquid to flow into the device.
- Install the device in a well-ventilated location and do not block the ventilation openings.
- Do not apply heavy pressure, violent vibration, or immerse the device.
- When transporting the device, use the original factory packaging or packaging of equivalent quality.
- It is recommended to connect the grounding hole on the device to ground to improve reliability.

Operation and Maintenance Requirements:

Do not disassemble the device without authorization. Use accessories or parts specified by the manufacturer, and have installation and repair carried out by professional service personnel.

Product Features:

Safety: powered by 24V DC power supply;

Energy saving: static power less than 2W, can drive motors up to 250W;

Adjustable speed: opening and closing speeds are adjusted independently.

Smooth operation: multi-stage speed design for stable and smooth working performance.

Quiet: operating noise below 50dB;

Multiple protection: motor over-current, overload and short-circuit protection, motor fault protection, and reverse-polarity protection;

Supports external Remote controller input;

Supports anti-freezing, anti-rust and other functions;

Supports multiple relay output modes.

Specifications:

Power Supply	DC 24V $\pm$ 10%, 10A
Motor Power	Max. 250W
Static Power	<2W
Opening/Closing Speed	Adjustable 1%-100%
Operating Ambient Temperature	-35°C ~ 75°C
Operating Ambient Humidity	30% ~ 80% (no condensation)

Common Function Menu	
P-00 Opening Speed	P-01 Closing Speed
P-06 Final-Stage Opening Speed	P-07 Final-Stage Closing Speed
P-08 Final-Stage Opening Deceleration Position	P-09 Final-Stage Closing Deceleration Position
P-13 Remote controller Learning	P-14 Auto-Close Time
P-23 Opening Direction	P-27 Restore Factory Settings
P-31 Sensor Interface Function Setting	P-32 Partial-Open Mode Interface Function Setting
P-34 Counting Function	P-64 Sliding Door Type
P-71 Single-Key Cycle Switch Function	P-73 Alarm Light Working Mode
P-74 Alarm Light Flash Frequency	P-75 Illegal Opening Alarm Function
P-76 Traffic Light Mode	P-78 Push-to-Open Function
P-80 Relay Output Mode	P-81 Limit Learning Mode
P-82 Manual Learning of Closing Position	P-83 Manual Learning of Opening Position
P-87 Sensor Delayed Closing Time	P-88 Door Partial-Open Position
P-89 Display Ambient Temperature	P-90 Anti-Freeze Temperature Threshold
P-91 Anti-Freeze Actuation Distance	P-92 Anti-Freeze Actuation Interval

Advanced Function Menu	
P-02 Mid-Opening Deceleration Position	P-03 Mid-Closing Deceleration Position
P-04 Opening Acceleration Time	P-05 Closing Acceleration Time
P-10 Closing Brake Position	P-11 Closing Brake Duration
P-12 Initial Open/Close Speed Setting	P-15 Access Signal Delayed Opening Time
P-17 Secondary Closing Confirmation	P-18 Obstruction Rebound Sensitivity
P-19 Obstruction Rebound Force	P-20 Obstruction Rebound Disable Position
P-22 Motor Type	P-24 Open/Close Buffer Time
P-25 Stop Buffer Time	P-26 Remote controller Adding Method
P-28 Motor Locking Force	P-29 Fully-Open Motor Locking Time
P-30 Fully-Closed Motor Locking Time	P-33 Auto Test Function
P-35 Closing Sensor Signal Ignore Position	P-36 Opening Sensor Signal Ignore Position
P-37 Sensor Signal Buzzer Frequency	P-38 Access Signal Valid Time
P-39 Electric Lock Type	P-40 RS-485 Baud Rate
P-41 RS-485 Device ID	P-42 RS-485 Master/Slave Mode
P-43 RS-485 Active Status Transmission	P-44 Opening Signal Priority
P-45 Ambient Light Intensity	P-46 Light Intensity Threshold
P-47 Delayed Light-On	P-48 Delayed Light-Off
P-49 Open/Close Timeout Time	P-54 Bluetooth Setting
P-55 Power-Off Auto-Run Voltage	P-56 Power-Off Auto-Run Mode
P-57 Display Mode	P-58 Illegal Push Auto-Close Count
P-59 Motor Overcurrent Protection Value	P-62 Output Power Limit
P-67 Electric Lock Energized Position	P-68 Opening Obstruction Protection Value
P-72 Light Output Mode	P-77 Obstruction Rebound Sensitivity Boost
P-79 Opening Reverse Function	P-84 Opening End-Position Fine-Tune
P-85 Closing End-Position Fine-Tune	P-86 Illegal Push Detection Sensitivity

1. Controller Button Instructions

The controller has 5 buttons. From left to right they are "Open/+ ", "Close/- ", "Menu", "Stop/Cancel" and "HOT-KEY". Various parameters of the controller can be set through these 5 buttons.

"Open/+ ": In normal working state, pressing this button opens the door. After entering the setting state, use this button to increase menu items and adjust the set value upward. In the parameter setting state, each short press increases by one. A long press continuously increases to the maximum value, then starts increasing again from the minimum. If the long press lasts longer, the increment speeds up.

"Close/- ": In normal working state, pressing this button closes the door. After entering the setting state, use this button to decrease menu items and adjust the set value downward. In the parameter setting state, each short press decreases by one. A long press continuously decreases to the minimum value, then starts decreasing again from the maximum. If the long press lasts longer, the decrement speeds up.

"Menu": This button has 3 functions:

1. In normal working mode, press and hold this button for 3 seconds to enter the menu item selection state. The LED displays "P-XX". At this time, press "Open/+ " or "Close/- " to select the menu item;
2. In the menu item selection state, short-press "Menu" to enter the parameter setting state;
3. After the parameter is set, short-press to save and exit.

"Stop/Cancel": In normal working, this button provides the stop function. In the menu item selection state, it exits the setting state. In the parameter setting state, pressing this button exits that state and returns to the menu selection state, i.e. returns to the previous menu, and the set value becomes invalid. If no button is operated within 60 seconds in the menu selection or parameter setting state, the buzzer sounds a long beep and the controller returns to the normal working state.

"HOT-KEY": In normal working state, pressing and holding this button makes the display count in seconds; releasing it triggers the corresponding HOT-KEY function.

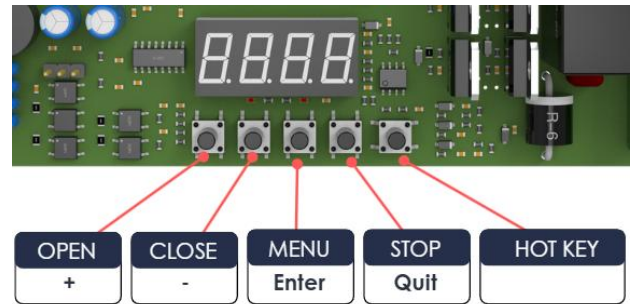
1. Release after holding for 3 seconds to automatically switch the motor direction;
2. Release after holding for 6 seconds to quickly learn the Remote controller;
3. Hold for 10 seconds to restore factory settings.

2. Display

The control board has a 4-digit LED display, used to show the working status of the gate, parameters, menu items and other information. After power-on, it runs in low-power mode and the LED brightness is dim. Pressing any button switches the LED display to the normal working mode with high brightness. If no button is pressed, it enters low-power mode after 60 seconds and the LED dims to reduce power consumption. If no button is pressed after 2 minutes, the LED display turns off and enters the lowest energy state.

3. Parameter Setting

Press and hold the "Menu" button for 3 seconds to enter the parameter setting state; the LED displays "P-XX". Use the "Open/+ " and "Close/- " buttons, by short or long press, to select a menu item: each short press adds or subtracts one, and a long press adjusts continuously. Press "Menu" again to enter the setting of the selected item; press "Stop/Cancel" to return to the previous level or exit the setting. After a parameter is set, it must be confirmed by pressing "Menu" to take effect. Parameters set while pressing "Stop/Cancel" will not take effect. If no button is pressed within 60 seconds, the buzzer on the control board sounds a long beep, exits the setting state and returns to the normal working state.



4. Quick Modes

Normally-open mode: After the door is fully open, press and hold "Stop" on the Remote controller for 5s to enter normally-open mode: press "Close" to cancel the normally-open function;

Remote-control Partial-Open mode: When the door is fully closed or closing and the door position is below the Partial-Open position, press and hold "Open" on the Remote controller for 2 seconds; the door enters Partial-Open mode and opens only to the Partial-Open position set by P-88;

Cancel motion-sensing open mode: After the door is fully closed, press and hold "Close" on the Remote controller for 5s to disable the motion-sensing open function;

Enable motion-sensing open mode: After the door is fully open, press and hold "Open" on the Remote controller for 5s to enable the motion-sensing open function;

5. Jumper Cap Instructions

The control board has 2 jumper caps, used respectively to select the magnetic lock voltage and the opening signal type of the access controller. Each jumper location is clearly labeled on the board.

12V/24V: Select the supply voltage according to the power specification of the magnetic lock used.

Relay signal / Voltage signal: Select according to the output signal of the access controller. The relay signal is a digital signal. If the access controller outputs a relay opening, select relay opening. The voltage signal means the access controller outputs 5-24V voltage.

6. Controller Function List

Common Function Menu				
Menu	Function	Default	Range	Description
P-00	Opening Speed	80	10-100	The larger the value, the faster the speed; the smaller the value, the slower the speed.
P-01	Closing Speed	80	10-100	The larger the value, the faster the speed; the smaller the value, the slower the speed.
P-06	Final-Stage Opening Speed	25	1-80	Finish the opening at this speed. The larger the value, the faster the speed. If the speed is too high, the door may shake at the end of opening; in this case reduce this value.
P-07	Final-Stage Closing Speed	25	1-80	Finish the closing at this speed. The larger the value, the faster the speed. If the speed is too high, the door may hit the frame during closing; in this case reduce this value. If the door cannot close fully, increase this value.
P-08	Final-Stage Opening Deceleration Position	90	45-90	When opening, the door first accelerates to P-00, then begins to decelerate at P-02; at this option it stops decelerating and enters low-speed uniform motion until opening is finished.
P-09	Final-Stage Closing Deceleration Position	2	0-45	When closing, the door first accelerates to P-01, then begins to decelerate at P-03; at this option it stops decelerating and enters low-speed uniform motion until closing is finished.

P-13	Remote controller Learning	0	0-60	Remote controller learning: Entering P-13 displays the current number of saved Remote controllers. Then press the Open/Stop/Close buttons of the Remote controller in sequence to learn. Keep pressing until the control board beeps once, then release and press the next button. When the control board gives a long beep, or the number on the display increases by one, learning is complete. You may learn the next one or press Cancel to return. Remote controller deletion: Under this menu, press "+" or "-" to modify the value of a learned Remote controller, press "Menu" to confirm, and delete the learned Remote controller corresponding to that value.
P-14	Auto-Close Time	0	0-255	After the door is fully open, if no ground-sensing/microwave signal is triggered within the specified time, the door closes automatically. If set to 0, the door does not close automatically. Unit: 1 second.
P-23	Opening Direction	0	0-1	Value range: 0-1, default: 0. 0 is left-opening, 1 is right-opening.
P-27	Restore Factory Settings	0	0-255	This option has three functions: clearing Remote controllers, partially restoring factory settings, and fully restoring factory settings. To prevent accidental operation, a specific value must be set, then press "Menu" to complete the operation. 5: clear Remote controllers; 10: restore factory settings (Remote controllers and motor type are not restored); 15: fully restore factory settings.
P-31	Sensor Interface Function Setting	2	0-7	Range: 0-7, default: 2. This parameter is for the motion-sensing port IN1; different values provide different functions. 0: disabled; 1: motion-sensing function, closes immediately after no person is detected; 2: motion-sensing function, closes after the delayed closing time of P87 after no person is detected; 3: only receives external signal input after fully closed, does not detect during closing; 4: Partial-Open function, "Access + " and "Access - " interfaces are effective; 5: Partial-Open function, "Access + " and "Access - " interfaces are ineffective; 6: close; 7: stop;

P-32	Partial-Open Mode Interface Function Setting	2	0-7	Range: 0-7, default: 2. This parameter is for the motion-sensing port IN2; different values provide different functions. 0: disabled; 1: motion-sensing function, closes immediately after no person is detected; 2: motion-sensing function, closes after the delayed closing time of P87 after no person is detected; 3: only receives external signal input after fully closed, does not detect during closing; 4: Partial-Open function, "Access + " and "Access - " interfaces are effective; 5: Partial-Open function, "Access + " and "Access - " interfaces are ineffective; 6: close; 7: stop; If either P-31 or P-32 is set to make the "Access + " and "Access - " interfaces ineffective, then both interfaces are disabled.
P-34	Counting Function	1	0-4	0: no counting of opening actions, closes after passage; 1: count the opening signals with a maximum count of 1; the count is decremented when motion sensing is triggered, and the door closes when motion sensing disappears and the count is 0; 2-3: count value of 2-3; 4: count the opening signals with a maximum count of 255; the count is decremented when motion sensing is triggered, and the door closes when motion sensing disappears and the count is 0.
P-64	Sliding Door Type	0	0-6	Range: 0-4, default: 0, of which: 0: single door; 1: main leaf of a double door, the other leaf must be set to 2; 2: slave leaf of a double door, the other leaf must be set to 1; 5: main leaf of an interlock door, the other leaf must be set to 6; 6: slave leaf of an interlock door, the other leaf must be set to 5;
P-71	Single-Key Cycle Switch Function	0	0-2	0: not reused; 1: reused as the PUSH function; the opening triggered by this port synchronously sends the open signal to the slave with RS-485 device ID 2, and all closing signals of the device are also synchronized to the slave with device ID 2; 2: reused as the PUSH function; the signal is changed

				to falling-edge triggering, or triggered when the signal program lasts for 3 seconds; when opening is triggered by a 3-second long press, the open signal is synchronized to the slave with RS-485 device ID 2, and all closing signals of the device are also synchronized to the slave with device ID 2 (PUSH interface description: when the Controller is fully open, triggering PUSH closes the door; when the Controller is in other states, triggering PUSH opens the door)
P-73	Alarm Light Working Mode	3	0-3	0: alarm light off; 1: flashing during opening; 2: flashing during closing; 3: flashing during both opening and closing.
P-74	Alarm Light Flash Frequency	1	0-2	0: flashing alternately at 2Hz; 1: flashing alternately at 1Hz; 2: flashing alternately at 0.5Hz.
P-75	Illegal Opening Alarm Function	0	0-1	0: off; 1: on.
P-76	Traffic Light Mode	0	0-3	0: traffic-light mode 1: green light when the opening angle is greater than 60°, red light when closing starts; 1: traffic-light mode 2: green light when fully open, red light in other states; 2: position-state output: green light when fully open, red light when fully closed, both lights off in other states; 3: position-pulse output: green light for 1 second when fully open, red light for 1 second when fully closed.
P-77	Obstruction Rebound Sensitivity Boost	0	0-1	Make the minimum trigger threshold of the obstruction rebound force of P19 more sensitive. 0-off, 1-on.
P-78	Push-to-Open Function	0	0-10	0-0-disable push-to-open; 1-10 enable the push-to-open function, which takes effect after the door is fully closed; the smaller the value, the more sensitive. 1-(When this function is effective, the P58 manual-push auto-close function is invalid)
P-80	Relay Output Mode	0	0-4	0: close when opening starts, open when closing starts; 1: closed when fully open, open when fully closed; 2: closed when fully closed, open in other states; 3: closed for a 1-second pulse when fully open; 4: closed for a 1-second pulse when fully closed;

P-81	Limit Learning Mode	0	0-3	0-Use external sensor limit; 1-Auto-find mechanical limit; 2-Only find the opening limit (both mechanical limit and sensor limit are valid); 3-Only find the closing limit (both mechanical limit and sensor limit are valid);
P-82	Manual Learning of Closing Position	/	/	Entering the setting displays L-00, automatically opens the door to find the opening limit, stops when in position and displays L-01. The user manually presses the "Open/Close" button to control the door position to find the fully-closed position, then presses "Menu" to confirm and save. (Valid when P-81 is 2)
P-83	Manual Learning of Opening Position	/	/	Entering the setting displays L-00, automatically closes the door to find the closing limit, stops when in position and displays L-01. The user manually presses the "Open/Close" button to control the door position to find the fully-open position, then presses "Menu" to confirm and save. (Valid when P-81 is 3)
P-87	Sensor Delayed Closing Time	2	0-255	How long after the microwave/ground-sensing signal disappears before closing starts.
P-88	Door Partial-Open Position	50	10-80	Door Partial-Open position setting, unit: percentage of the fully-open position.
P-89	Display Ambient Temperature	/	/	This option is used to display the current ambient temperature on the display.
P-90	Anti-Freeze Temperature Threshold	5	-40-40	At low temperature, to prevent the machine from freezing, after this function is enabled, when the door is fully closed and the temperature is lower than the value set by this option, if the door has not moved within the time of P-92, it automatically runs to the position of P-91 and then closes again.
P-91	Anti-Freeze Actuation Distance	5	0-45	Opening position percentage for anti-freeze. When the ambient temperature drops to the temperature set by P-90, and the timing time set by the P-92 anti-freeze interval command is reached, the door opens to the angle set by this parameter and then automatically closes. If this parameter is 0, the anti-freeze function is disabled. Only when both P-91 and P-92 are not 0 is the anti-freeze function enabled.
P-92	Anti-Freeze Actuation Interval	0	0-255	When the ambient temperature is lower than the set temperature, timing starts. If the gate has no running action within the timing period, when the time interval set by this command is reached, the gate opens to the angle set by P-91 and then automatically closes. If this parameter is set to 0, the anti-freeze function is disabled. (Unit: minute)

Advanced Function Settings				
Menu	Function	Default	Range	Description
P-02	Mid-Opening Deceleration Position	75	10-90	Used to set the position where deceleration begins during opening. Expressed in degrees: 0° when the door is closed, 90° when fully open. This parameter means the door starts to decelerate when it opens to this angle.
P-03	Mid-Closing Deceleration Position	20	0-80	Used to set the position where deceleration begins during closing. Expressed in degrees: 0° when the door is closed, 90° when fully open. This parameter means the door starts to decelerate when it closes to this angle.
P-04	Opening Acceleration Time	100	0-255	The time required to accelerate to the opening speed set by P-00 when opening starts (the larger the value, the longer the time). (Unit: 0.01 second)
P-05	Closing Acceleration Time	100	0-255	The time required to accelerate to the closing speed set by P-01 when closing starts (the larger the value, the longer the time). (Unit: 0.01 second)
P-10	Closing Brake Position	0	0-30	Start closing at the final-stage closing speed from this position. If the closing vibration is large, reduce this value. If it is 0, no braking.
P-11	Closing Brake Duration	0	0-255	Braking time when closing, unit: 0.01 second. A brake point is set at the closing brake angle. If the closing vibration is still large after both the closing stop speed and the closing buffer start position are adjusted to the limits, this is generally because the door inertia is large; a braking time can be set. The default is 0, i.e. no braking.
P-12	Initial Open/Close Speed Setting	80	10-80	After the control board is powered on, it needs to find the origin position at a certain speed. If the speed after power-on is too high or too low, set it through this parameter. The larger the number, the higher the speed.
P-15	Access Signal Delayed Opening Time	1	0-100	Range 1-100, unit: 0.1 second, default 1. Waiting time for the magnetic lock to release.
P-17	Secondary Closing Confirmation	0	0-60	The main purpose of this parameter is to apply force again to confirm the closing after the door is fully closed, ensuring that the magnetic lock can lock. 0: stop directly after the door is fully closed and enter the fully-closed state; greater than 0: after the door reaches the fully-closed position, continue to apply closing force for secondary closing confirmation. The larger the value,

				the greater the secondary closing confirmation force. When the lock cannot lock, increase this value.
P-18	Obstruction Rebound Sensitivity	5	1-40	How long an obstruction must be detected to be judged as obstruction. (Unit: 0.05 second)
P-19	Obstruction Rebound Force	60	1-100	How much resistance is considered an obstruction. The rebound condition is: the resistance set by P-19 is detected and lasts for the time set by P-18, then the door reverses and opens.
P-20	Obstruction Rebound Disable Position	10	0-90	When the closing angle is less than the angle of this option, no obstruction rebound is performed. 0 disables this function.
P-21	Normally-open mode	0	0-3	0: normal remote-control mode (temporary entry into normally-open mode in normal remote-control mode: when the value is 0, after the sliding door is fully open, press and hold the Stop button of the Remote controller for more than 5 seconds to temporarily enter normally-open mode; the buzzer gives a long beep for 2 seconds. Press Close to exit normally-open mode and the gate closes); 1: pressing remote-control "Open" enters normally-open mode; motion-sensing signals are not processed until Close is manually pressed, and the door stays open; 2: manual mode, all opening actions of the Controller enter normally-open mode, and triggering motion sensing does not close the door; 3: normally-open mode disabled.
P-22	Motor Type	0	0-3	Value range: 0-3; default: 1. Because the Hall polarity of the motor, the reduction ratio of the sliding door mechanism and the left/right opening direction of the sliding door differ, this parameter is used to be compatible with various motor and door types.
P-24	Open/Close Buffer Time	60	10-255	Buffer time when switching from opening to closing and from closing to opening. If the time is too short, instantaneous current may be too high; a slightly longer time gives a smoother transition. (Unit: 0.01 second)
P-25	Stop Buffer Time	60	10-255	The time required for the motor to go from running to stop when Stop is pressed during opening or closing. If too large, the stop is very slow and stable; if too short, instantaneous current may be too high. (Unit: 0.01 second)
P-26	Remote controller Adding Method	0	0-4	0: learn by pressing Open/Stop/Close in sequence; 1: learning is complete after pressing any one button;

P-28	Motor Locking Force	255	0-30	When the motor stops before reaching the fully-open/fully-closed area, the controller outputs a locking control to lock the door, which can cause the motor and board to heat up. It is recommended to set it according to the actual situation and not too large. When set to 255, the locking power is automatically adapted.
P-29	Fully-Open Motor Locking Time	0	0-255	How long the motor is locked after the sliding door is fully open. (Unit: second) When set to 255, the motor is kept locked when fully open without timing.
P-30	Fully-Closed Motor Locking Time	0	0-255	How long the motor is locked after the sliding door is fully closed. (Unit: second) When set to 255, the motor is kept locked when fully closed without timing.
P-33	Auto Test Function	0	2-255	Auto-test time interval. 0 means auto test is disabled; used for auto test and aging test. After the test is complete, set this parameter to 0 to release auto test. Short-press the "Open" button to start.
P-35	Closing Sensor Signal Ignore Position	5	0-45	When the closing angle is lower than this value, the motion-sensing signal will not be processed and the door closes directly.
P-36	Opening Sensor Signal Ignore Position	85	0-85	During opening, when motion sensing is less than the set angle, the motion-sensing trigger is invalid.
P-37	Sensor Signal Buzzer Frequency	4	0-10	Buzzer frequency when motion sensing is triggered. 0: disabled; 1: short beep once; 2-10: beep continuously at the specified frequency, the larger the number the faster the beeping.
P-38	Access Signal Valid Time	10	1-255	How long the open, close, stop, access and motion-sensing signals must last to be considered a valid signal. (Unit: 0.01 second).
P-39	Electric Lock Type	0	0-3	Range: 0-3, default: 0. Different values correspond to different lock types. 0: electromagnetic lock, energized to lock, de-energized to unlock; 1: electric strike lock, energized to unlock, de-energized to lock; 2: electric control lock, energized to unlock, no action when de-energized, locks automatically after fully locked; 3: mechanical lock, energized to unlock, closing relies on the door inertia to push in, similar to a domestic mortise lock;
P-40	RS-485 Baud Rate	4	0-4	Sets the baud rate of the control board: 0:9600;1:19200;2:38400;3:57600;4:115200.
P-41	RS-485 Device ID	0	0-63	The address of this control board on the RS-485 bus.

P-42	RS-485 Master/Slave Mode	0	0-1	Sets the master/slave mode of the control board: 0: slave mode; 1: master mode.
P-43	RS-485 Active Status Transmission	0	0-1	When set to 1, when the gate starts an opening/closing action, the gate status command is automatically sent.
P-44	Opening Signal Priority	0	0-80	0: all control signals have the same priority in any state; 1: opening has the highest priority, other signals are useless during opening; 2: during opening, if the vehicle has passed the ground sensor, closing starts immediately without waiting until fully open. 50-80: during opening, if the vehicle has passed the ground sensor before fully open, closing starts immediately when the door opens to the position of this set value.
P-45	Ambient Light Intensity	0	0-0	The current light intensity of the environment; the smaller the value, the brighter.
P-46	Light Intensity Threshold	30	0-255	When the ambient light intensity is greater than this value, the light-strip interface signal is output.
P-47	Delayed Light-On	10	0-255	How long the light-strip signal is delayed before output when the current light intensity is greater than P-46. (Unit: second)
P-48	Delayed Light-Off	250	0-255	How long the light-strip output is delayed before turning off when the ambient light intensity is lower than P-46. (Unit: second)
P-49	Open/Close Timeout Time	60	6-120	Sets the opening/closing timeout time. If the door does not reach position within the set time during opening or closing, the sliding door pauses automatically and reports an opening timeout warning (Err5) or closing timeout warning (Err6). (Unit: second)
P-54	Bluetooth Setting	0	0-255	
P-55	Power-Off Auto-Run Voltage	0	0-30	0: off; 1: 21 triggers the automatic open/close voltage; this function requires a backup power supply and must be used together with P-56; it is recommended to set it to 20.
P-56	Power-Off Auto-Run Mode	1	0-4	Sets the power-off auto-run option. When P-55 is not 0, when the supply voltage is detected to be lower than the value set by P-55, the handling method for the sliding door: 0: no action; 1: auto-open; 2: auto-close;
P-57	Display Mode	2	0-2	0: display the gate status; 1: during gate opening and closing, the display shows the driving voltage (unit: V) or driving current (unit: A);

				in working mode, short-press the "Menu" button to switch between displaying current and voltage; 2: display the motor position.
P-58	Illegal Push Auto-Close Count	255	0-255	When fully closed, if the door is manually pushed beyond the position set by P-86, the machine automatically triggers closing. When the number of manual pushes and auto-closes exceeds this value, it no longer triggers closing. Each normal open/close cycle clears the accumulated auto-close count. If set to 255, no counting is performed and the function is always effective.
P-59	Motor Overcurrent Protection Value	120	20-180	Overcurrent protection value. When the running current of the sliding door exceeds this value, the sliding door stops automatically. If overcurrent protection occurs during closing, the sliding door is treated as obstruction rebound. (Unit: 0.1A)
P-62	Output Power Limit	80	20-100	During operation of the gate, the maximum limited output power in % (operate with caution if not a professional)
P-67	Electric Lock Energized Position	20	0-30	The angle at which the magnetic lock starts to lock when closing.
P-68	Opening Obstruction Protection Value	60	0-255	The force used to judge obstruction during opening.
P-72	Light Output Mode	1	0-1	0: lighting mode; 1: alarm light mode.
P-77	Obstruction Rebound Sensitivity Boost	0	0-1	Make the minimum trigger threshold of the obstruction rebound force of P19 more sensitive. 0-off, 1-on.
P-79	Opening Reverse Function	0	0-1	When opening is triggered at the fully-closed position, the door first reverses in the closing direction for a short time, then opens. It can be used to solve the problem of opening failure caused by some door locks being stuck when opened directly.
P-84	Opening End-Position Fine-Tune	15	0-255	The distance between the fully-open position and the opening limit. (Valid when P-81 is 1, or when P-81 is 2 and no opening limit sensor is installed)
P-85	Closing End-Position Fine-Tune	15	0-255	The distance between the fully-closed position and the closing limit. (Valid when P-81 is 1, or when P-81 is 3 and no closing limit sensor is installed)
P-86	Illegal Push Detection Sensitivity	5	3-255	After the door is fully closed, the position change that triggers automatic closing when the door is detected to have been pushed open by someone. The larger the value, the larger the allowed movement; the smaller the value, the easier it is to trigger.

7. Common Fault Codes

Error Code	Error Cause
Err0	When clearing Remote controllers and restoring factory settings, the correct confirmation value must be set; if incorrect, an Err0 error is displayed.
Err1	/
Err2	Braking back-EMF voltage too high warning; it can be solved by reducing the
Err3	Opening stall. Possible causes: opening speed too low or final-stage opening speed too low.
Err4	Closing stall. Possible causes: closing speed or final-stage closing speed too low. Increase the closing speed or the final-stage closing speed.
Err5	Opening timeout: the opening time exceeds P-49. Increase the opening speed and the final-stage opening speed.
Err6	Closing timeout: the closing time exceeds P-49. Increase the closing speed and the final-stage closing speed.
Err7	Wrong motor type selected. Change it to the correct type through P-22.
Err8	/

8. Screen Display Information

Display	Meaning
IDLE	Motor not connected, or motor Hall fault; possibly loose wiring.
STOP	Sliding door fully closed
CLOS	Sliding door closing
OPEN	Sliding door opening
HOLD	Sliding door fully open
LOCK	Sliding door locked
FLET	Normally-open mode

9. Controller Wiring Diagram:

