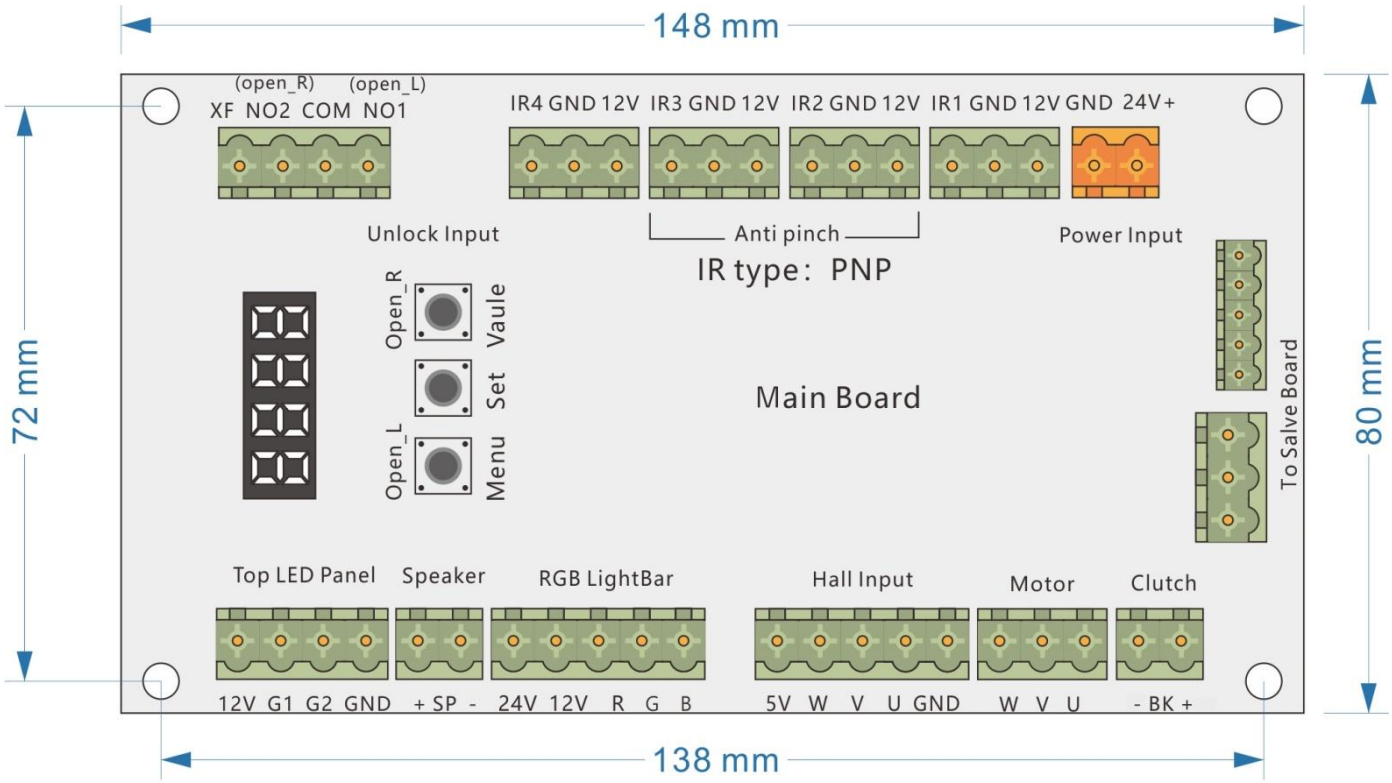
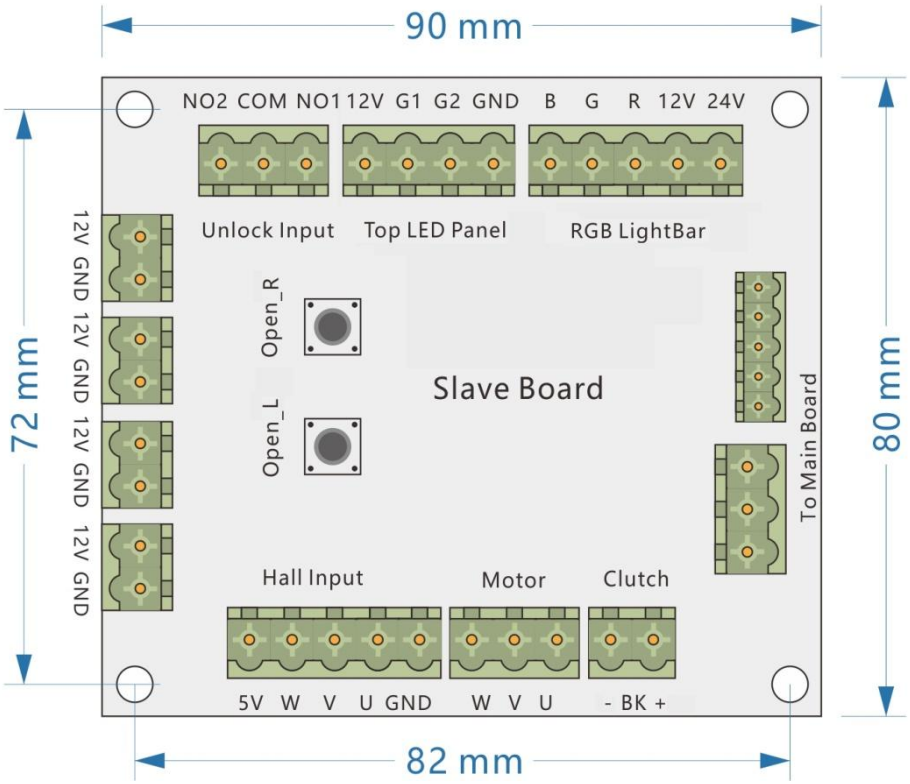
Swing Barrier

(TBH101)

Manual

Wiring Diagram of Control Panel





Gate Limit Position Adjustment Under Swing Barrier Mode

1. Press “SET” (middle button) for 5 times continuously, the system will prompt "please adjust gate manually".

2. Push the gate to the target position and stop it for 3 seconds. The speaker prompt "beep" or the LED light flashes once, the system will take the current position as the target position.

* The system will automatically determine whether the target position is left, right or middle target

position.

3. Finally, push the gate to the middle target position and holding for about 10 seconds. The system will prompt " adjustment completed ", then the whole program is finished.

*In most cases, the system will automatically obtain the appropriate left position and right position, and the user only needs to adjust the middle position.

Gate Limit Position Adjustment Under Flap Barrier Mode

1. Press “SET” (middle button) 5 times continuously, and the system prompts "Please adjust the gate position manually" and enter the adjustment mode.

2. The "Open_L" and "Open_R" on the motherboard can control the main motor for reciprocating motion, and the "Open_L" and "Open_R" on the slave board can control the slave motor for reciprocating motion, adjust the gate to the target position through the button and keep it for 3 seconds, The speaker will make a "beep" sound once or the corresponding LED light flashes, which indicates that the current position has been sampled.

* The system will automatically determine whether the current sampling position is left or right limit position.

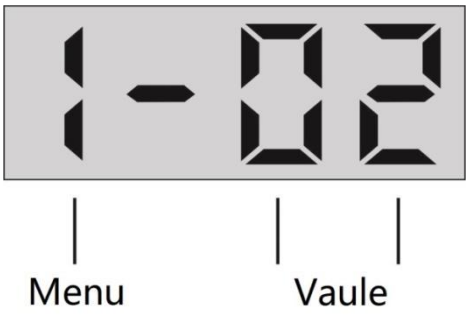
3. Long press the middle button for more than 2 seconds and release, and the program will exit the adjustment mode.

Parameter Setting

1. Long press the “Set” button until the nixie tube flashes to to enter parameter setting.

2. The "Menu" button for chosing the menu, the "Vaule" button for setting the parameter.

3. Long press the "Set" button again to exit and save the parameter.



* As shown in the figure above, it means that the current menu is "Open Mode", and parameter 02 means "open by left IR1 induction".

Menu	Function	Range	Default	Parameter Function Description
0	Machine Number	1~99	1	For 485 Communication
1	Open Mode	1~4	1	1: Standard Open 2: Open By IR1 Induction 3: Open By IR4 Induction 4: Open By Both IR1 and IR4 Induction * The top indicator light will change according to the adjustment, and the direction of infrared photocell can please refer to the arrow direction of the top indicator light.

2	Auto-closing Time	1~20	6	Time Unit: Second
3	Voice Content Of Left Open	0~9	0	0: Thank you; 1: Come in; 2: goodbye; 3: Welcome; 4: See you; 5: Have a safe trip; 6: Have a nice trip; 7: Please put on your safety helmet; 8: Successful validation; 9: Mute; 10: Welcome home; 11: Welcome to school; 12: Be careful when back home; 13: Welcome to the kindergarten; 14: See you, dear kids *For the directions corresponding to the voice, please refer to the arrow direction of the top indicator light.
4	Voice Content Of Right Open	0~9	3	
5	Voice Volume	1~9	5	The higher the value, the higher the volume
6	Main Motor Speed	1~25	13	The higher the value, the higher the speed
7	Slave Motor Speed	1~25	13	
8	Adjustment Mode	0~2	0	1: Automatic Aging Test (either long press the middle button or power off to restart can exit the automatic aging mode) 2: Restore the factory default setting (it will take effect by restarting)
9	Deceleration Range	1~30	10	The larger the value, the larger the deceleration interval, and the longer the deceleration distance. If the gate speed is much slower when closing to its limit position, users can turn down the value; if the gate speed is too fast with shaking when closing to its limit position, user can turn up this value.
10	Self-checking Speed	1~9	3	The higher the value, the faster the self-checking speed.
11	Passing Mode	0~2	0	0: Smooth passing mode, the gate will auto close after 1.5 seconds when the electric bicycle is detected. 1: Memory function is on, N people swipe the card, then N people can pass, that is say, if 3 cards is swiped or the card is swiped three times, 3 people can pass, 2: One person one card mode, without electric bicycle detection function.
12	Locking Control	0~9	1	0: When pedestrian reach the last sensor, the gate will close. 1: When pedestrian pass through the last sensor, the gate will close. 2 ~ 9: After passing the last group of IR, the gate will close with a delay (n-1 second)
13	Motor Model	0~1	0	0: Dual motor; 1: Solo motor
14	Language	0~1	0	0: Chinese; 1: English
15	Stacking Control	0~1	1	0: No rebound in resistance 1: Rebound in resistance

16	Stacking Sensitivity	1~9	5	The higher the value, the higher the sensitivity
17	Retrograde Control	0~1	1	0: Retrograde trigger does not close the gate, only voice alarm; 1: The gate will be closed by retrograde.
18	Type of Gate	0~3	0	0: Swing gate (quick pass gate) 1: Cylindrical swing gate (supermarket swing gate) 2: Wing gate. 3: Swing gate open single direction model
19	Gate Open Direction When Power Off	0~2	2	0: Open to left; 1: Open to right; 2. Open automatically *For the gate open direction, please refer to the arrow direction of the top indicator light.
20	Force of Pushing the Gate	1~9	5	The greater the value, the greater the force. Excessive force may cause power restart. It is recommended to use the default value for 6.25A power supply.
21	Illegal Intrusion Voice	0~1	1	0: There is no voice prompt when the illegal intrusion event occurs. 1: There are relevant voice prompts when an illegal intrusion event occurs.
22	IR Signal Respond Delay	1~9	5	Time=Value*20ms (default 100ms)
23	Motors running direction	1~4	1	1: Forward rotation of main motor and reverse rotation of slave motor; 2: Reverse rotation of main motor and forward rotation of slave motor; 3: Forward rotation of main motor and forward rotation of slave motor; 4: Reverse rotation of main motor and reverse rotation of slave motor.
24	Clutch Control	0~1	0	0: Normal lock; 1: Normal unlock
25	Hall Mode of Motor	0~2	0	0: Auto; 1: Mode A; 2: Mode B
26	Input Filtering	1~9	3	Value*10ms (default 30ms)
27	IR Anti-pinch During Unlocking Stroke	0~1	0	0: Function off; 1: Function on
28	Anti-tailing alarm	0~2	0	0: Function off; 1: Alarm and not close; 2. Alarm and close
29	Sliding gate Alarm Threshold	0~9	2	The larger the value, the greater the allowable offset position
30	Anti-pinch IR Free Passage Switch	0~1	1	0: Anti-pinch IR does not trigger the opening of the gate in the free passage mode;

				1: Free passage mode anti-pinch IR trigger to open the gate for fast passage.
31	Free Passage Memory Function Switch	0~1	1	0: Function off, only one person can pass through when multiple triggered infrared; 1: Function on, n people can pass through when n times triggered infrared.
32	Main Motor Sliding Compensation	0~9	0	After the self-inspection is completed, the sliding compensation can be appropriately increased when the opening and closing gate plate cannot return to the zero position for the first time. Excessive compensation may cause the door panel to shake when it stops. Please make sure that the door panel moves smoothly and adjust this parameter.
33	Slave Motor Slip Compensation	0~9	0	

Troubleshooting

Fault Code on Digital Tube	**Fault Cause**	**Solution**
E010	No main motor is detected	Hall wire or motor wire is wrongly connected, and motor Hall fault.
E020	No salve motor is detected	
E030	Main and slave motor are not detected	
E050	Abnormal self-test	Wrong sequence of Hall phase or motor phase, motor fault, mechanical slipping or jamming

*The 4th digit of the digital tube represents IR-related errors, the 3rd digit represents motor-related errors, and the 2nd digit represents other types of errors. The error codes will be stacked, for example E021, indicating salve motor error and IR error.