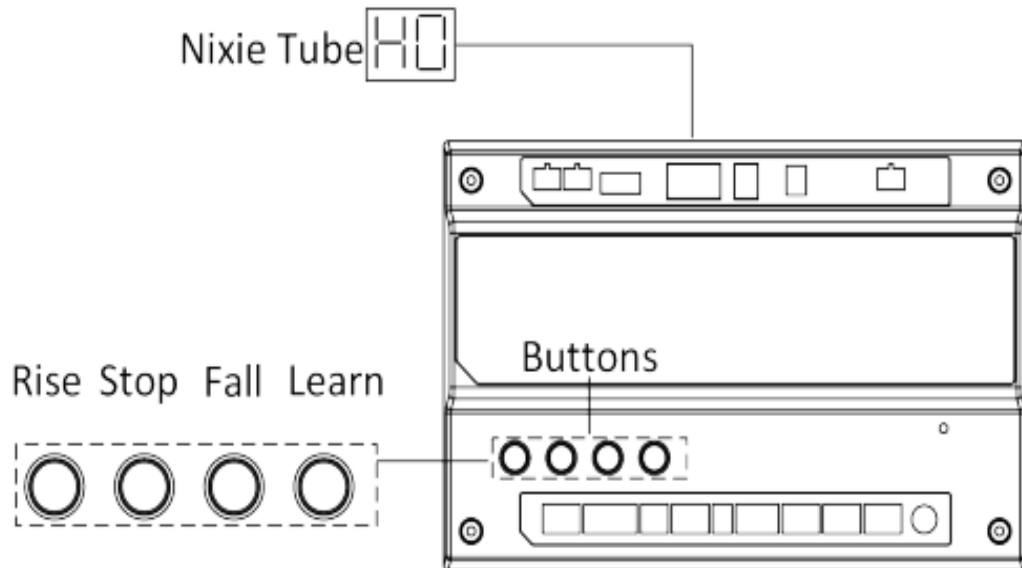


52 道闸换向及调整杆长/How to change pole direction or pole length for TMG520

I、道闸简介\Introduction of barrier

1) 控制盒\Control box



数码管：用于显示状态、设置

开、停、关按钮：分别对应控制道闸开闸、停止动作、关闸

学习按钮：用于学习限位、设置

Nixie tube: display status and settings

Open\ stop\ close buttons: to rise/fall/stop the boom pole

Learn button: used for learning limit and setting

2) 数码管显示含义\Nixie tube display

① 状态显示\Status

No.	Type	Display	State	Remarks
1	Status Display	"00"	Normal	
2		"XX"hexadecimal numbers except "00"	Fault state. The number is the specific fault code	
3		"Lr"	learning limit	
4		"Lc"	locking barrier	

故障代码具体可参见用户手册 4.3 Fault Code Description

For specific fault codes, please refer to section 4.3 Fault Code Description in the user manual.

② 菜单显示\Menu

No.		Display	State	Remarks
1	Type	"H0"	menu	
2		"H1"	Adjust the rising/falling limit	when entering "H1", the pole is open, then adjust rising limit; when it is close, adjust falling limit
3		"H2"	Adjust the rising speed	After entering "H2", there are L1\L2\L3 three levels, and L3 is the fastest.
4		"H3"	Adjust the fall speed	After enter "H3", there are L1\L2\L3 three levels, and L3 is the fastest.
5		"H4"	Learn/Clear the code via the remote controller	1. After entering "H4", the nixie tube will display "PA". Press any button of the remote control twice, and the nixie tube display will become "00", which means that the remote control is successfully paired and automatically exits to the normal working state. 2. Long press the Stop button when "PA", and the nixie tube display will change to "H4", which means that all remote control pairs are cleared successfully.
6		"H5"	Set the vehicle queue mode	After entering "H5", 1 means this function is enable, 0 is disable.
7		"H6"	Set the auto falling	After entering "H6", 1 means this function is enable, 0 is disable.
8		"H7"	Set the auto falling duration	After entering "H7", it will shows number, and the number * 10 is the time duration.
9		"H8"	Lock the barrier gate via the remote controller	After entering "H8", 1 means this function is enable, 0 is disable. The lock operation is raise - fall - raise.
10		"H9"	Set the rising limit output mode	After entering "H9", 1 means this function is enable, 0 is disable.
11		"HA"	rising or falling when power off	After entering "HA", 1 means if power off, raise the pole, 0 is fall.

12		"Hb"	Set pole length and type	After entering "Hb", set pole length and type as need.
----	--	------	--------------------------	--

菜单具体设置步骤参见用户手册 Table 3-1 Button Operation Description 部分。

For specific menu setting steps, please refer to the Table 3-1 Button Operation Description section in the user manual.

2) 手动自动切换\Manual and automatic switching

道闸上电时无法切换手动自动模式，需要**断电**

The barrier cannot switch between manual and automatic modes when powered on, so you need to **power off first**.

① 将 L 型扳手插入机芯六角孔

① Insert the L-type wrench into the hexagonal hole of the movement.





- ② 若杆子在开到位，顺时针转动 L 型扳手为手动挡；
若杆子在关到位，逆时针转动 L 型扳手为手动挡；

If the pole is in the open limit, turn the L-type wrench clockwise to switch to manual mode;
If the pole is in the close limit, turn the L-type wrench anti-clockwise to switch to manual mode;

转动 L 型扳手使杆子在非到位状态即为手动挡；杆子在开到位和关到位即为自动挡。

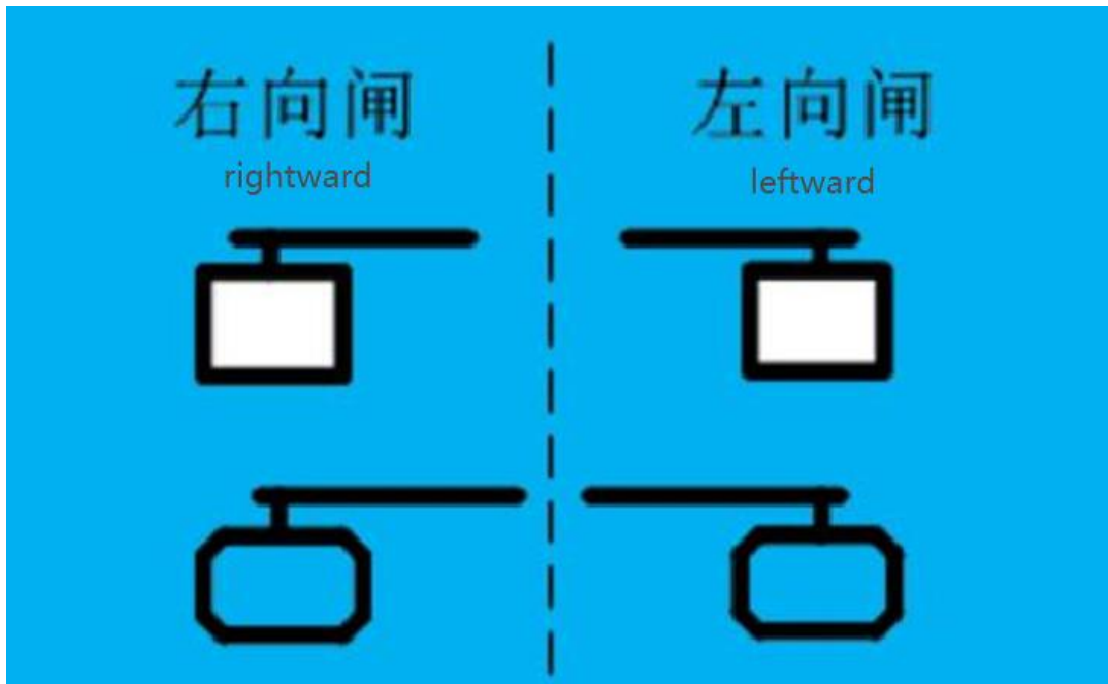
Turning the L-type wrench to make the pole in a non-limit state is manual mode; the pole is in the open or close limit, which is automatic mode.

II、左右换向\Change pole direction

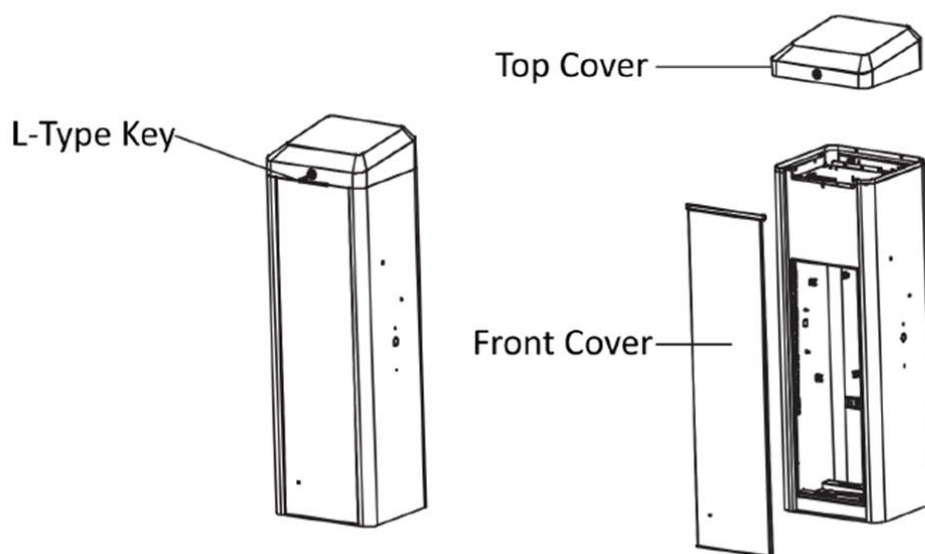
1) 确认当前方向\ Confirm the current direction

默认直杆及曲臂道闸出厂为右向闸（栅栏杆由于杆件原因，区分左右向，出场时需注意）；如果现场需要右向道闸，无需换向，道闸方向判断如下图

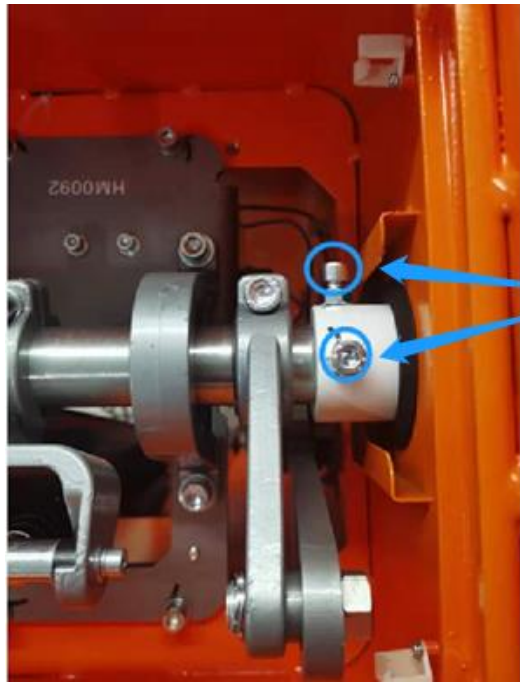
The default straight pole and curved pole barrier are rightward when they leave the factory (For the fence pole, the barrier distinguishes between left and right, and attention should be paid when leaving the factory); if a rightward barrier is needed on site, there is no need to change direction. The barrier direction is judged as shown in the figure below:



2) 道闸**断电**，移除顶盖及 logo 面前面板，移除所有外部接线，如电源线、控制线等。
Power off the barrier, remove the top cover and the front cover which with logo, and remove all external wiring, such as power cable, control cable.



3) 通过手自动切换，分别在开到位和关到位的状态下拆掉机箱内部的两个夹头螺丝。
Through manual and automatic switching, remove the two clamp screws inside the chassis in the open and close limit respectively.



卸下内部固定的两个螺丝
remove the clamp screws

4) 用 L 型扳手拆掉夹头外侧螺丝，并卸下电机至控制盒接线

Use the L-type wrench to remove the screws on the outside of the clamp and remove the wiring which come from motor to the control box



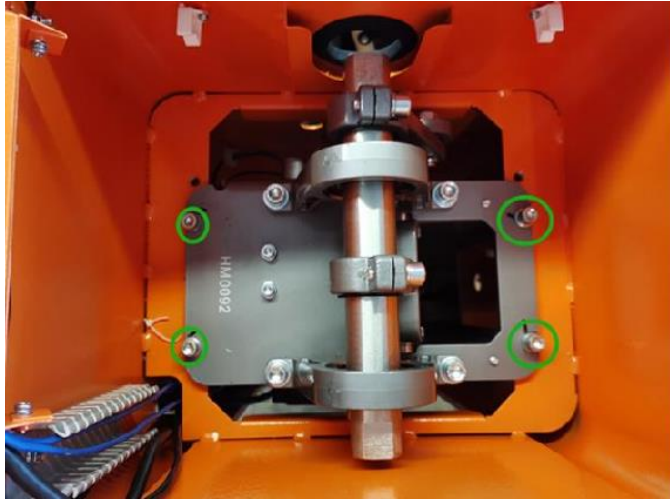
卸下夹头外部的
固定螺丝
Remove the
screws



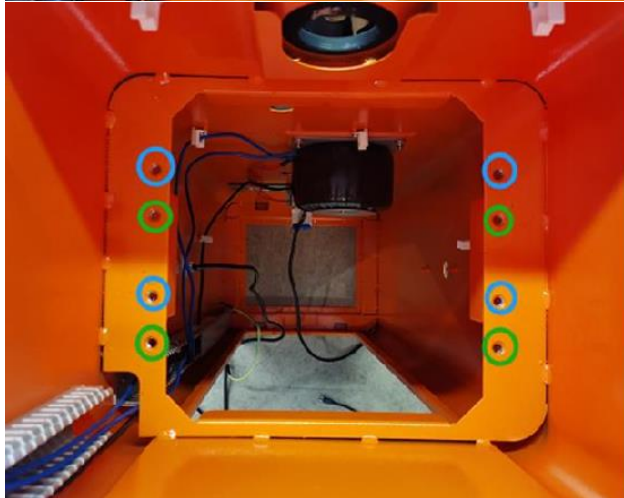
去除控制盒上电机接线
Remove all the wiring

5) 卸下机芯固定的 4 个内六角螺丝，并将机芯取出，旋转 180 度后放回机箱，更换另一付孔位进行安装固定。下图中蓝色部分为右向道闸使用，绿色部分为左向道闸使用。

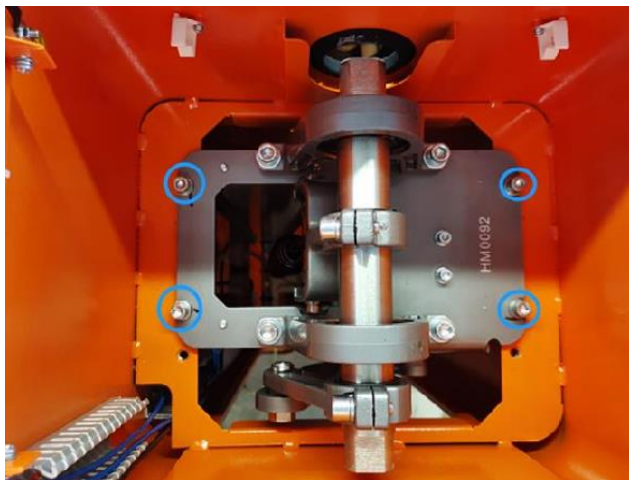
Remove the 4 hexagonal screws that fix the movement, take out the movement, rotate it 180 degrees and put it back into the chassis, and replace the other pair of holes for installation and fixing. In the figure below, the blue part is used for rightward barrier and the green part is used for leftward barrier.



将固定道闸机芯的4个内六角螺丝卸下
Remove the screws which fixing the movement



机芯拆下后在固定支架上可以看到8个空位;
蓝色圈对应4孔位为右向道闸使用;
绿色圈对应4孔位为左向道闸使用。
after removing movement, there are 8 holes, the blue parts for rightward;
the green parts for leftward



将机芯旋转180°后置入机箱，并更换另一幅孔位固定
turn the movement 180°, and fix it with different holes

6) 固定夹头，将外侧和内部固定螺丝旋回后固定。
Fix the clamp and fix it after turning back the outer and inner fixing screws.

7) 恢复电机至控制盒接线、外部接线。换向完成。
Restore the motor to the control box wiring and external wiring. The direction change is complete.

III、杆长调整\Pole length adjustment

1) 根据调整杆长前后长度确认需要需要更换内容。

- ① 3米变为4米/4米变为3米：杆子
- ② 3米、4米变为6米：更换弹簧、夹头、杆子
- ③ 6米变为3米、4米：更换弹簧、夹头、杆子

Confirm the content that needs to be replaced according to the length of the pole before and after adjustment.

- ① 3 meters to 4 meters/4 meters to 3 meters: pole
- ② 3 meters, 4 meters to 6 meters: replace spring, clamp, pole
- ③ 6 meters to 3 meters, 4 meters: replace spring, clamp, pole

Pole length	Spring code	No. of spring	Clamp
3m	Spring 2	1	small
4m	Spring 2	1	small
6m	Spring 2	1	big
	Spring 1	1	

2) 根据需要进行更换

- ① 杆子
- ② 夹头
- ③ 弹簧

Replace as needed

- ① Pole
- ② Clamp
- ③ Spring

3) 调整平衡\Adjust balance

平衡调试前，确保道闸断电

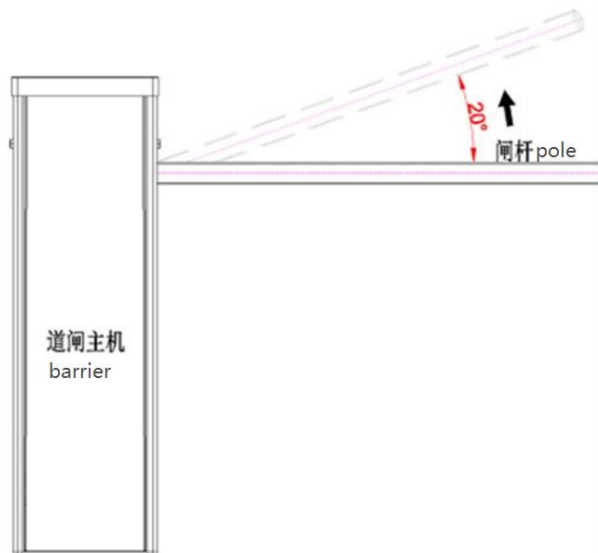
Before adjusting the balance, make sure the barrier is **powered off**.

平衡标准:

将杆子下压至与地面成约 20°左右夹角后松手，等待杆子自动回升，最终是否停在 60±5°

Balance standard:

Press the pole down to an angle of about 20° with the ground and release it. Wait for the pole to rise automatically and finally stop at 60±5°.



① 平衡测试

旋转 L 型扳手，切换到手动模式，检查是否符合平衡标准；若不符合平衡标准，则进行下一步。

② 调整弹簧

若杆子无法抬起，则弹簧过松，在机芯底部位置，将螺丝逆时针拧紧即可，直至符合平衡标准；

若杆子抬起超过预期位置，则弹簧过紧，将螺丝顺时针拧松即可，直接符合平衡标准。

① Balance test

Rotate the L-type wrench to switch to manual mode and check if it meets the balance standard. If it does not meet the balance standard, proceed to the next step.

② Adjust the spring

If the pole cannot be lifted, the spring is too loose. At the bottom of the movement, tighten the screw counterclockwise until it meets the balance standard.

If the pole is lifted beyond the expected position, the spring is too tight. Loosen the screw clockwise until it meets the balance standard.



4) 杆长设置\ Pole length setting

调整弹簧符合平衡标准后，道闸上电，使道闸处于开到位状态。

① 长按“学习”按钮，数码管显示“H0”

② 按关按钮，调整至“Hb”，长按学习进入

After adjusting the spring to meet the balance standard, power on the barrier and make the barrier in the open position

① Press and hold the “Learn” button, and the digital tube displays “H0”.

② Press the close button to adjust to “Hb” and press and hold Learn to enter.



③ 根据需要设置杆长及类型

数码管第一位表示长度，第二位表示杆型，其中未显示表示直杆，显示“C”表示曲臂杆，显示“F”表示栅栏杆，通过按开关按键顺次调整数值到需要杆型。图例为 3 米直杆。

③ Set the pole length and type as needed

The first digit of the digital tube represents the length, and the second digit represents the pole type. If it is not displayed, it means a straight pole. If “C” is displayed, it means a curved arm pole. If “F” is displayed, it means a fence pole. Press the open/close button to adjust the value to the required pole type in sequence. The example is a 3-meter straight pole.



④ 短按“学习”按钮，保存当前配置并退出。退出后数码管显示“H0”

Press the “Learn” button briefly to save the current configuration and exit. After exiting, the digital tube displays “H0”.

5) 开关闸测试

5) Open and close barrier for test