How to configure TMG4B0

1. 产品介绍 Product Description

本道闸用于限制机动车的进出。道闸可通过停车场管理系统进行自动控制，也可可以通过遥控器来进行控制。

广泛适用于收费站、停车场、小区、单位出入口等场所。

Barrier gate is the entrance and exit management device to limit motor vehicle passing. It can control the boom pole automatically via parking lot management system. Or you can control the boom pole via buttons on remote controller.

Barrier gate is widely applicable to toll station, parking lot, the entrance and exit of community and unit, etc.

工作电压 Power Supply	AC220V±15%
电机功率 Consumption	60W
使用环境温度 Working Temperature	-30℃ to 70 ℃ (-22 ℉ to 158 ℉)
道闸杆长度 Pole Length	3m\4m\6m
闸杆中心离地高度 Boom Pole Height	890mm
防护等级 Ingress Protection	IP54
遥控频率 Remote Control Frequency	430.5MHz
遥控距离 Remote Distance	≤30M

Pole Type	Pole Length (M)	Raising time(S)	Falling time(S)
直杆 Straight pole	≤4M	3	3
伸缩直杆	≤4M	3	3
	6M	6	6
曲臂 Curved pole	≤4M	3	3
	6M	6	6

方向\Direction：

2. 安装架设 Installation

2.1 安装说明\Installation Description

1、打开包装箱，按配件清单清点相关随机零配件。

Open the package, and check the accessories according to the accessory checklist.

2、根据所选用闸机左右向及安装现场实际情况，确定道闸主机的安装位置，对非混凝土地基或道闸主机安装有斜坡的情况，建议砌混凝土地基，并应确保地基与基础结合牢固，道闸主机机身与水平面垂直度小于 1° 。

Confirm the installation position of the barrier according to the boom pole direction and the actual condition of the installation site. For the non-concrete foundation or the position with slope, it is recommended to build the concrete foundation first. Make sure the base of the barrier can be fixed firmly on the foundation, and the perpendicularity of the barrier to the horizontal plane is smaller than 1°.

3、根据控制室可岗亭的位置，依据相关规定铺设电源线和控制线管(建议电源线和控制线分别穿在不同的线管中)。

Lay power cables and control wires tubes according to corresponding regulations and the position of the control room. It is recommended that the power cables and control wires are laid in different tubes.

4、在道闸主机安装位置安装膨胀螺钉(根据清单实际配备的配件确定)将道闸主机固定牢固后，方可使用。

Install expansion screws on the installation position of the barrier to fix the host firmly.

5、用摇把将闸杆摇到水平位置，确定闸杆端部托的安装位置，并用螺丝将托杆固定牢固(无托杆情况无需安装)。

Rotate the crank handle to set the boom pole to the horizontal position to confirm the

installation position of the support rod at the end of the boom pole, and fix the support rod firmly with screws (Ignore this if there is no support rod).

6、仔细对照接线图，将电源线和相关控制线接到闸机控制板上，确定无误后，拧紧调试。
Connect the power cables and control wires to the control board of the host according to the wiring diagram. Fasten them and start debug after confirming the connection is correct.

注:以上操作均应在断电的情况下运行。
Note: Cut off power before installation.

2.2 安装\Installation
(1)线路预埋\ Bury cables.
按客户的要求将机箱位置定好，如需浇筑混凝土基座可事先完成(基座尺寸大小要比道闸底部外形尺寸大小多出约 100-150mm)，在机箱固定位置的中心点到控制室或岗亭之间预埋或开挖电缆线沟，埋放线管，穿入设备所用的 31.5 平方毫米电源线和 4*0.5 平方毫米控制线，确定无误后，回填混凝土。
1) Dig a ditch and bury cable tubes between the center of the host fixed position and the control room.
2) Pass 3 × 1.5 mm² power cables and 4 × 0.5 mm² control wires through the tubes.
3) Fill the ditch with concrete.

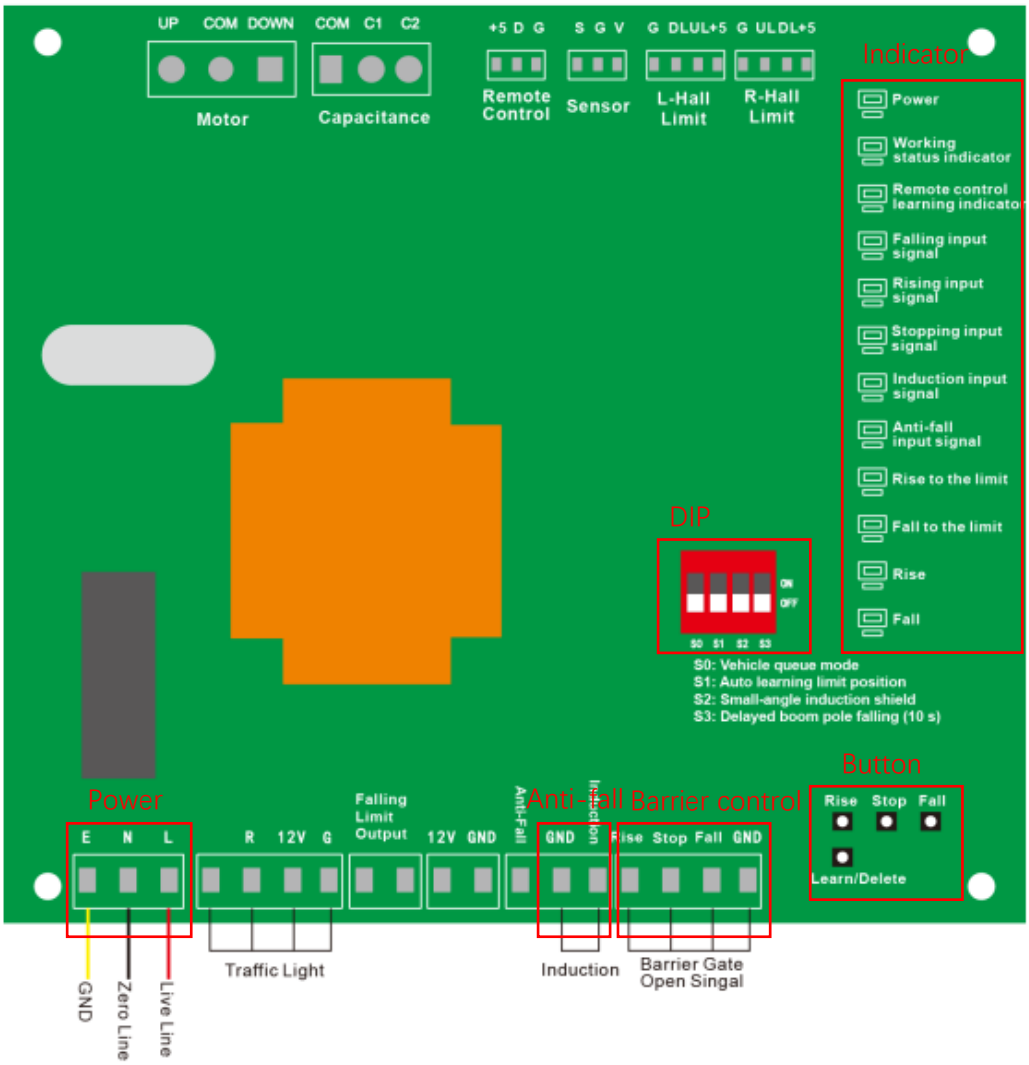
(2)固定机箱\ Fix the host.
将机箱放到固定位置，打开机箱门，然后在机箱底板的螺钉孔中心和机箱底座边缘做上记号，移开道闸，在做好记号的位置用钻头垂直打孔(钻头大小要与随设备配带的膨胀螺栓相匹配)，深度要符合膨胀螺钉的长度要求，将机箱移至原位，打入螺胀螺钉并紧固，固定牢固。
1) Put the host on the pre-confirmed position. Open the door, and make marks of the installation holes' centers on the bottom and the host base margins.
2) Remove the host, and punch holes on the marked positions of the screws.
3) Put the host on the pre-confirmed position. Punch expansion screws into the bottom holes and fasten them firmly.
Note: The drill size should be matched with the attached expansion screw, and the hole depth should meet the requirement of the expansion screw length.

(3)闸杆的安装\ Install the boom pole.
在道闸机箱固定牢固后，便可将闸杆安装在杆把位置，用配备的螺钉拧紧，并确定闸杆不倾斜，如需安装托杆，在调试好垂直，水平状态后，用摇把将闸杆摇到水平位置，确定杆端部托杆的安装位置，并用螺丝将托杆固定牢固(无托杆情况下无需安装)
1) Install the boom pole to the main shaft mounting on the host, and fasten the screws to make sure the boom pole does not tilt.
2) (Optional) If support rod is needed, debug the horizontal and vertical status of the

boom pole, rotate the crank handle to set the boom pole to the horizontal position to confirm the installation position of the support rod at the end of the boom pole, and fix the support rod firmly with screws.

(4) 外围设备的安装\ Install peripheral devices.
道闸安装牢固，并用调试完毕后，可以根据客户的需要，按道闸控制板接线图接好机箱线路和相关外围设备的控制线路，并进行相关的调试。
1) After the barrier installation and debug completes, wire the lines in the host and connect the control lines of the peripheral devices according to the wiring diagram.
2) Debug the devices.

3. 接线 Line Connection



1） 电源接口\Power interface

220V 交流电

Power supply, 220V AC

2）防砸接口\Anti-fall interface

连接防砸设备，如雷达、车检器等。当落杆时收到防砸信号，杆子会自动升起并保持不落杆在触发期间。防砸信号消失后，杆子会自动下落。

Connect to the anti-fall devices, such as radar、vehicle detector. When the boom pole is falling while the anti-fall signal is received, the boom pole will rise automatically and keep rising during the triggering process. After the anti-fall signal restores, the boom pole will fall automatically to guarantee safety.

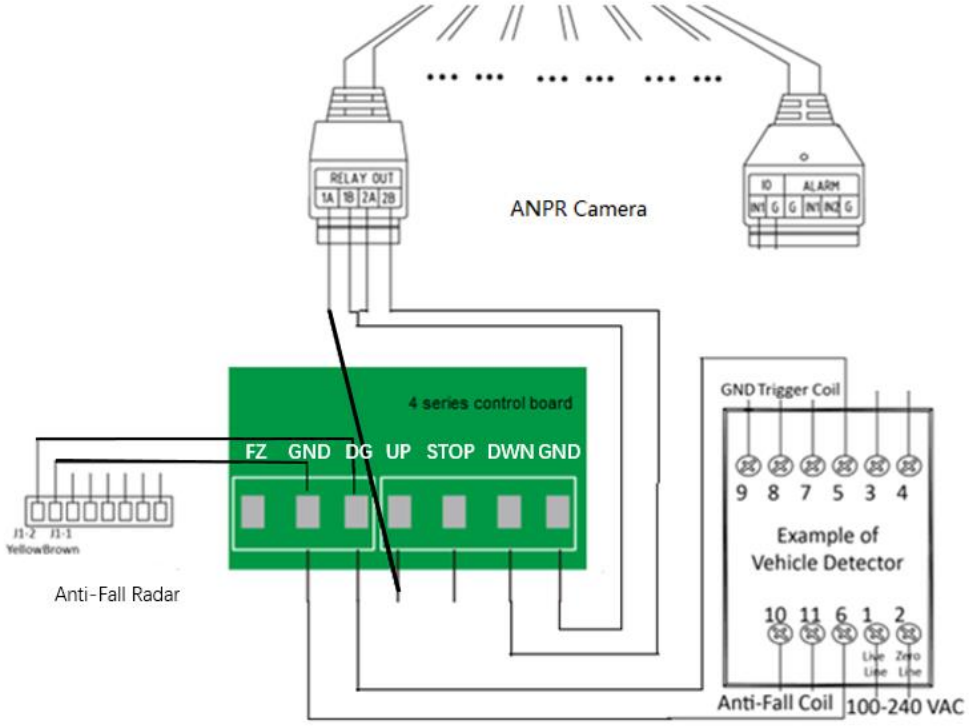
3）道闸控制接口\Barrier control interface

连接 ANPR 相机或者其他控制设备。

Connect to ANPR camera or other control devices.

以 TCG 系列相机为例，相机侧接口 1A1B，2A2B 连接到道闸控制接口；防砸设备连接到防砸接口。

Take TCG series camera and anti-fall radar for example, the 1A1B and 2A2B ports of camera connect to barrier control interface. The anti-fall devices connect to DG and GND.



4. 限位学习 Limit learning

1、自动学习模式:获取当前位置为起限位点(或落限位点)，然后自动寻找落限位点(或起限位点)，并判断道闸的方向。
将拔码开关 S1 拨到 ON 的位置。手动将闸杆调整到开限位(或关限位)，按下"COPY/DELETE+UP"键(或"COPY/DELETE+DWN"键)，设备以当前位置为开到位，自动寻找关到位(或设备以当前位置为关到位，自动寻找开到位)。
1. Switch S1 on.
2. Learn limit positions automatically.
1) Adjust the boom pole to the rising limit position (or falling limit position) manually.
2) Press Learn/Delete and Rise buttons (or Learn/Delete and Fall buttons). Then the boom pole will locate the current position as the rising limit position (or falling limit position), and locate the falling limit position (or rising limit position) automatically.

2、手动学习模式:手动精确定位起、落限位点。
将拔码开关 S1 拨到 OFF 的位置，手动将闸杆调整到合适的开到位位置，按下COPY/DELETE+UP"键，将当前位置保存为开到位的位置，手动将闸杆调整到合适的关到位位置，按下"COPY/DELETE+DWN"键，将当前位置保存为关到位的位置。
1) Switch S1 off.
2) Adjust the boom pole to the appropriate rising limit position manually.
3) Press Learn/Delete and Rise buttons to save the current position as the rising limit

position.
4) Adjust the boom pole to the appropriate falling limit position manually.
5) Press Learn/Delete and Fall buttons to save the current position as the falling limit position.

5. 遥控器学习 Remote control learning

出厂随机器附带遥控器已经学习过，可以直接使用。单独购买的遥控需要进行学习操作。1 个道闸最多支持同时学习 10 个遥控器。
The remote controller that comes with the barrier has been set, can be used directly. The Remote controller purchased separately have to do remote control learning.
One barrier only can register 10 remote controllers at most.

1）对码\Register remote
长按 COPY/DELETE 键 3 秒，学习指示灯闪烁，再按下遥控器上任意按钮，听到道闸发出响声即表示对码成功。
Hold COPY/DELETE button for 3s, then the learning status indicator will flash, press button on remote controller, if you hear di from barrier, it means register success.

2）清码\Clear code
长按 COPY/DELETE 键 5 秒，清除所有遥控器学习记录。
Hold COPY/DELETE button for 3s, will clear all records for remote controller.

6. 测试 Test

尝试分别通过主板按钮、道闸控制接口、遥控器控制开和关，确认均能正常工作。
Try to control the barrier through the button on motherboard, the barrier control interface and the remote controller, and confirm that all can work normally.

7 常见问题 Common Issue:

1）遥控器电池规格\battery
12V23A 电池一节\ One **12V23A** battery

2）故障分析\ Issue

序号	故障现象	故障原因	故障排除
1	电源指示灯不亮， 按键无反应	1、电源未连接；	1、连接电源；
2	电源指示灯亮， 遥控无反应	1、遥控编码不对； 2、接收模块不良； 3、存在同频干扰。 4、遥控器未学习。	1、重新编码； 2、更换接收模块； 3、更换其他频率。 4、学习遥控器。
3	电源指示灯亮， 起落杆指示灯正常， 电机不运行	1、电机线接触不良；	1、连接好电机线；
4	无法起、落杆限位	1、限位学习错误； 2、角度传感器坏；	1、重新学习起、落限位； 2、更换角度传感器。
5	遥控手柄无反应	1、手柄电池电量不足 2、手柄坏；	1、更换电池； 2、更换手柄；

No	Issue	Reason	Solution
1	The power indicator is off, no any response after pressing button	Barrier is not powered.	Check the power.
2	The power indicator is on, but no any response for remote controller	1. Antenna don't work 2. Remote controller is not registered 3. Remote controller has no battery 4. Remote controller is broken	1. Get new antenna 2. Register the Remote controller 3. Get battery and try again 4. Get new remote controller
3	Don't rise or fall	1. Locked by something 2. The raise\fall limit is in wrong position 3. Control box don't work	1. Remove wiring and try again 2. Do Limit setting 3. Test with another one which works
4	Barrier not fall auto after vehicle passed	1. Confirm the anti-fall radar\coil if triggered 2. Auto-fall function is not enable	1. Anti-fall radar\coil should not be triggered. 2. Switch S3 to on.
5	The new remote controller can't register	Antenna and remote controller mismatch	Check the model and version of remote controller.