SDK\_VERSION: 1.9.0

FIRMWARE\_VERSION: v1.9.0, PROTOCOL: V1, DETAIL: 6,6,XI1303,AC1300,v1.9.0

change prot\_flag to 3

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change prot\_flag to 3

set\_tgpio\_modbus\_baudrate, code=0

[SDK][ERROR][2022-11-02 01:07:17][base.py:338] - - API -> getset\_tgpio\_modbus\_data -> code=20, response=[]

store to register, code=20, ret=[]

ControllerError, code: 142

ControllerError, code: 142

[Program exit with code 0]

[https://www.youtube.com/watch?v=WE-5cEyClo03](https://www.youtube.com/watch?v=WE-5cEyClo0) and <https://www.robotshop.com/media/files/content/u/ufa/pdf/3d-printing-kit-uarm-robotic-arm-datasheet.pdf>

[http://help.xarm.cc/en/articles/3997200-guide-to-use-the-robotiq-gripper-on-xarm39](http://help.xarm.cc/en/articles/3997200-guide-to-use-the-robotiq-gripper-on-xarm)

[http://help.ufactory.cc/en/articles/4721853-how-to-use-third-party-equipment-on-xarm14](http://help.ufactory.cc/en/articles/4721853-how-to-use-third-party-equipment-on-xarm)

[https://cdn.shopify.com/s/files/1/0012/6979/2886/files/xArm\_Developer\_Manual.pdf?v=1597982510#page=43&zoom=100,176,67646](https://cdn.shopify.com/s/files/1/0012/6979/2886/files/xArm_Developer_Manual.pdf?v=1597982510#page=43&zoom=100,176,676)

[**My\_Indoor\_Farm**](https://forum.ufactory.cc/u/My_Indoor_Farm)

[Dec '20](https://forum.ufactory.cc/t/what-does-the-5000-set-tgpio-modbus-example-do/2754/3)

2

The program sends a data list to the tool here:

code, ret = arm.getset\_tgpio\_modbus\_data([0x08, 0x10, 0x07, 0x00, 0x00, 0x02, 0x04, 0x0, 0x0, 0x0, 130])

The bytes received on the RS485 lines of the gripper port for that command are 8 16 7 0 0 2 4 0 0 0 130 123 98 in decimal

Could you explain what the list items are and where they are defined?

This is the open gripper command so:

I believe the 0x08 refers to the gripper id of 08 for the biogripper. 10 is a function code The 123 and 98 are likely the CRC check but it doesn’t seem to match any CRC calculators that I can find.  
0x10 Hex is 16 Decimal so that is the function code  
the 7 0 is the starting register address  
0 2 indicates 2 registers  
4 0 means that it wants 4 bytes for the data  
the 0 0 0 130 dec is 0x0000 0x0082 hex  
the 123 98 is the CRC check  
The required response is 6 bytes plus the responding CRC check. I haven’t figured out the correct CRC to return so I am still getting an error

“Is it possible to get the xarm to use 00 00 instead of 00 02 in the protocol section of the request?  
Most TCPIP software uses the default 00 00 protocol (after the transaction id pair). It is supposed to be ignored under TCPIP but the xarm won’t respond unless the 00 02 is in that section. I know it says use 00 02 ‘for now’ in the developer manual but the only software I can find that has a feature to send a raw request is the Modbus Poll application using the ‘Test Center’ feature.”