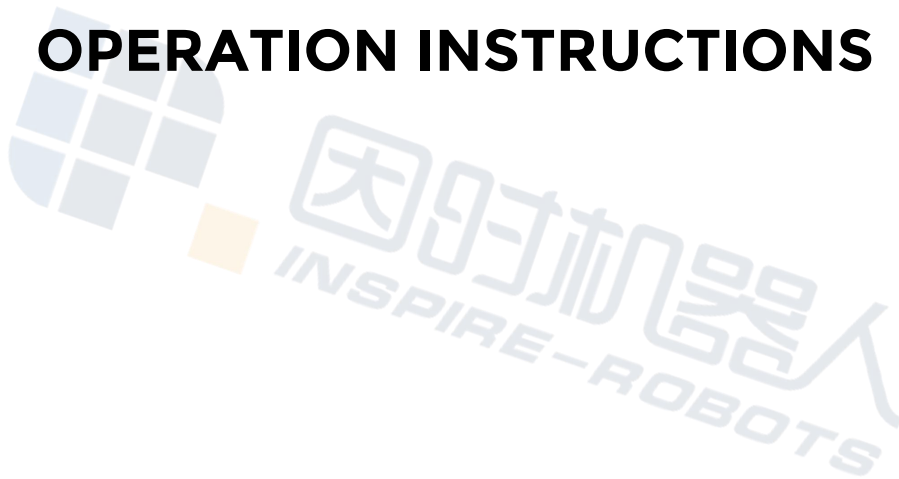


# ELECTRIC GRIPPER

## EG2-4X2

# OPERATION INSTRUCTIONS



## Instructions for EG2-4X2 Electric Gripper

EG2 Series Electric Gripper is an electric gripper designed with a small-volume high-torque linear servo driver (hereinafter referred to as "Electric Gripper"). It is equipped with a linear servo driver. For the user interface, the RS485 communication interface is used. The RS485 interface supports the MODBUS RTU protocol. There is a sensitive built-in pressure sensor. By setting different pressure threshold values, the user can easily grip objects with different hardness. Concise and efficient interface control instructions enables the user to quickly manipulate and control the gripper. The excellent performance makes this gripper suitable for applications such as service robot, teaching aids, etc.

### The gripper has the following features:

- ① Grip force: EG2-4B2 can achieve grip forces of 1.5 kg, and EG2-4C2 can achieve grip forces of 2 kg;
- ② Supply voltage: DC 9 V to 24 V power supply in a wide voltage range is available, and 24 V is recommended;
- ③ Positioning repeatability:  $\pm 0.5$  mm;
- ④ Maximum opening: 70 mm;
- ⑤ EG2-4X2 model uses the RS485 serial port and supports the MODBUS RTU protocol.

Please refer to the following instructions (EG2-4B2 as an example):



Exterior View of EG2-4B2

1. Connect the DC terminal of the aviation plug cable to the power adapter. Connect the aviation plug port to the aviation plug of the gripper. Turn on power supply.

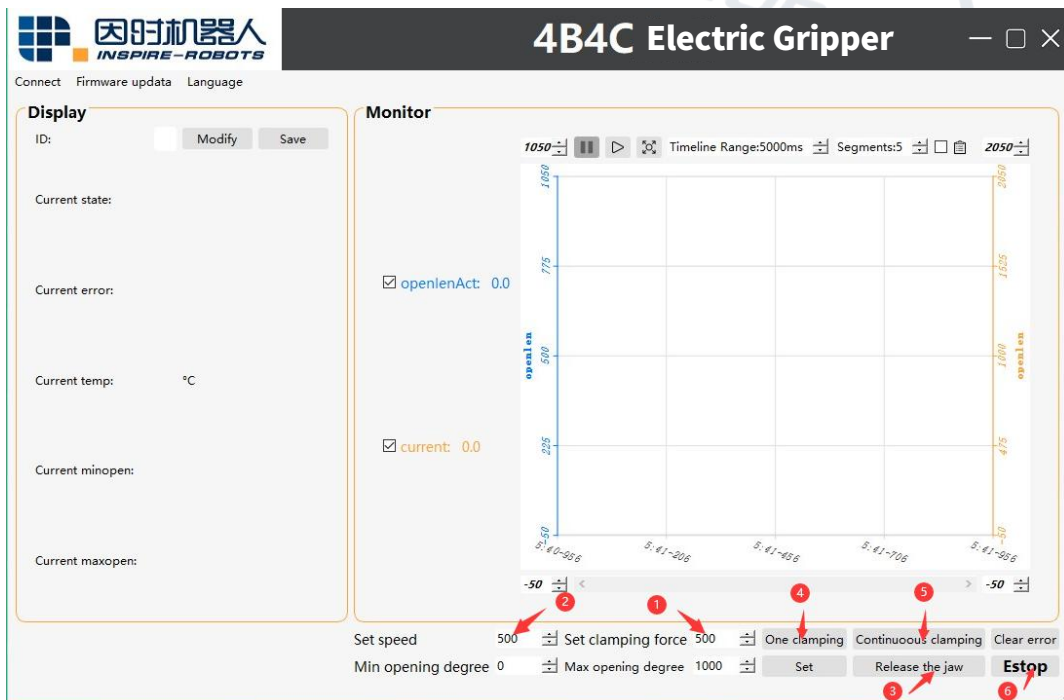
After power-on, the gripper will automatically remain in the position with maximum opening.



RS485 Interface Connection

PictureTest Cable Picture

2. Start "PC Software of Electric Gripper MCU". Click "Connect" and Select the corresponding serial port number to successfully connect the PC software.



PC Software Diagram

- ① Force control threshold: The magnitude of grip force can be set within the range of 0-1000;
- ② Speed: A speed can be set for gripper unclenching and grasping within the range of 0-1000;
- ③ Unclenching: The gripper moves to the position with maximum opening based on the speed parameter;
- ④ Grasping: The gripper closes and moves to the position with minimum opening based on the parameters of speed and force control threshold (if the real-time data for the gripper grasping an object during movement exceeds the set threshold, the gripper will stop moving);
- ⑤ Continuous grasping: The gripper closes and moves to the position with minimum opening based on the parameters of speed and force control threshold (if the real-time data for the gripper grasping an object during movement exceeds the set threshold, the gripper will stop moving; if the real-time force data decreases, the gripper will continue to close and move and will not stop moving until the real-time force data exceeds the set threshold; the gripper maintains force in this way);
- ⑥ Emergency stop: If emergency stop is selected while the gripper is unclenching or is closing and moving, the gripper in motion will stop moving and remain in the current position.

Click "Exit Software" in the upper right corner to exit the software.

3. See the User Manual for more details about the MODBUS RTU protocol.