



STM32 CONTROLLER INSTRUCTIONS



Instructions for STM32 Controller

Name: STM32 Controller

Model: AES-LA-71-0C

Function description: STM32F103C8T6 Controller (RS232 input, 12 output lines of LVTTL 3.3 V serial port) can control up to 12 Micro Linear Servo Actuators simultaneously.

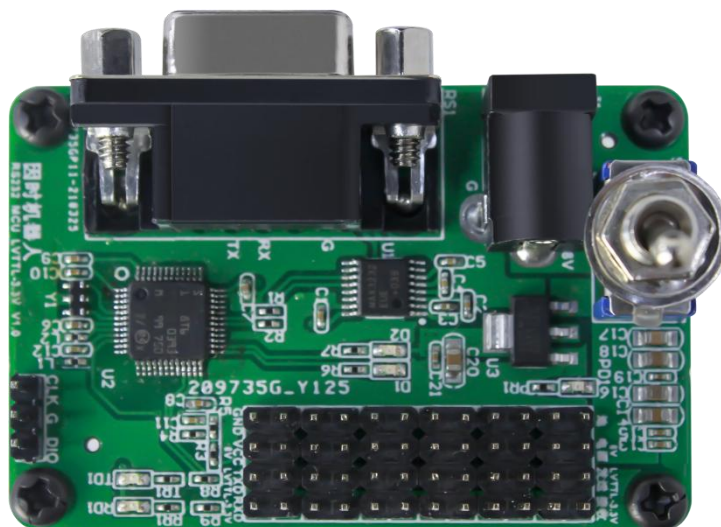
"Micro Linear Servo Actuator" is hereinafter referred to as "Actuator".

Serial Port 1 (PA9--TXD1 and PA10--RXD1) corresponds to the DB9 serial port.

Serial Port 3 (PB10--TXD3 and PB11--RXD3) corresponds to the socket strip for actuator control.

PB12--LED1 and PB13--LED2 are test indicator lamps. They will be turned on in case of low level.

Instructions are provided below:

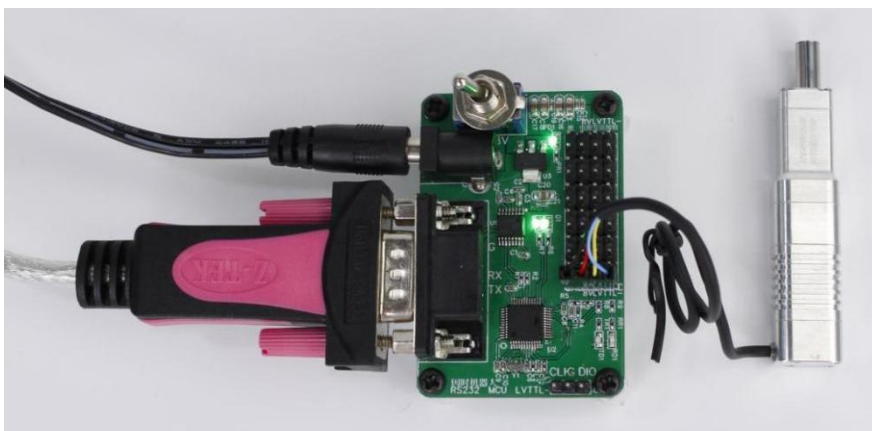


Exterior View of STM32 Module

1. Connect the USB to RS232 cable to DB9. Connect the power cable to the DC plug (DC5.5-2.1). Connect the actuator to the pin area (black wire to "GND", red wire to "VCC", yellow wire to "TXD", blue wire to "RXD"). At the same time, turn on the control switch to supply power (during connection, please note that the baud rate at the RS232 port should be 115200ps, and the baud rate at the actuator should be 921600bps).

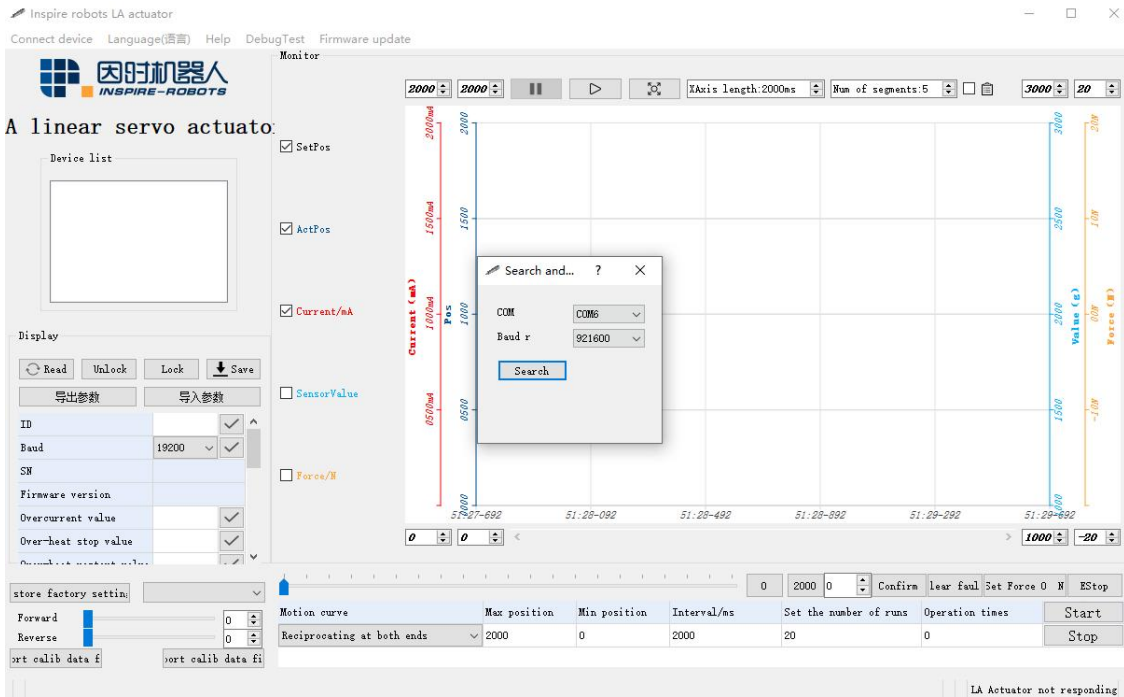


Correct Wiring Diagram of STM32 Controller

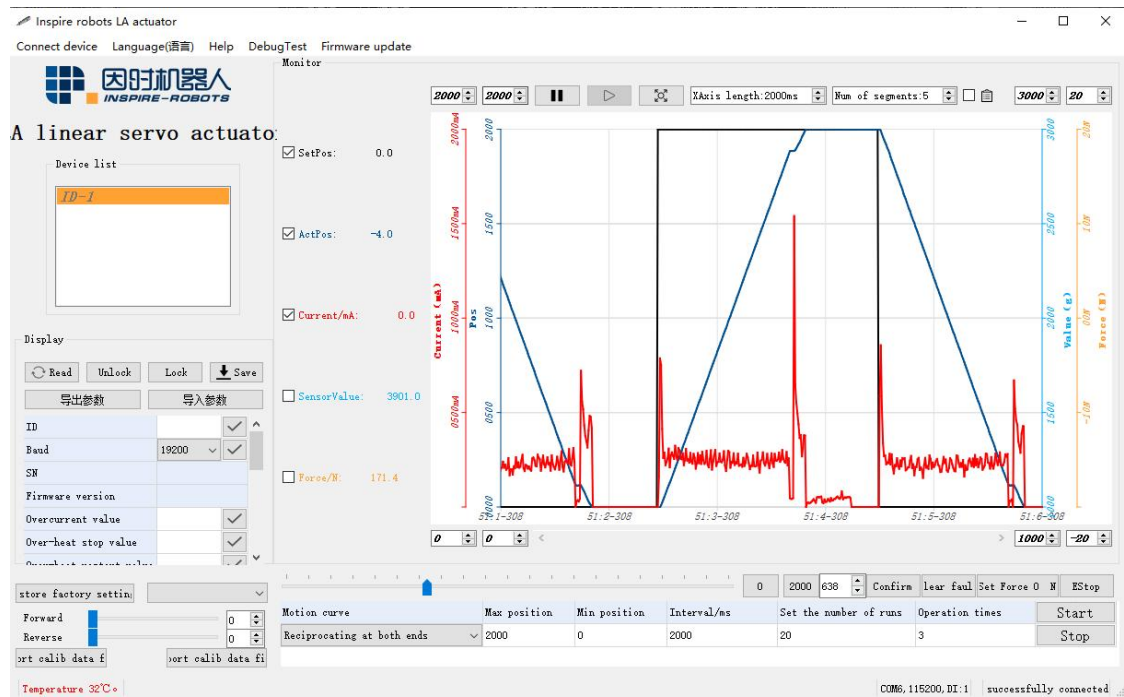


Operation Diagram of STM32 Controller

2. Start the PC software to connect the equipment. Select the corresponding COM port. After successful connection, click "Start". The actuator can operate normally. Observe the monitoring screen.



PC Software Connection Diagram ①



PC Software Connection Diagram ②

- 3. STM32 Controller enables the user to carry out programming control, code writing and debugging via the SWD interface, so achieving the motion control over the target.