



零差云控[®]

CAN_Update_Tool User Manual

Version 2.0



Build Robot Fast

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<https://en.zeroerr.cn>

Record of Revisions

Version	Iteration	Description	Date
2.0	2	Applied the new English format, Updated content.	2024/02/05

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Chapter 1 Preface

The latest firmware version integrates more features, optimizes and fixes some known issues. Specific changes can be viewed from our official website's firmware upgrade page [Firmware Versions](#).

Chapter 2 Instructions

2.1 Step 1: Preparing for Firmware Upgrade

- (1) Before upgrading the firmware, Please power OFF the eRob modules, Disconnect the communication connection between EtherCAT master or CANopen master and the eRob modules.

During firmware upgrade, only the eRob USB Debugger can be used to connect modules. Do not connect EtherCAT master or CANopen master controller. As shown in [Figure 2-1](#)

NOTE: If there are multiple eRob modules connected in series and they require a firmware update, please make sure each eRob module has a different CAN ID number. If the eRob modules do not have different CAN ID numbers, please refer to [Section 2.4](#).

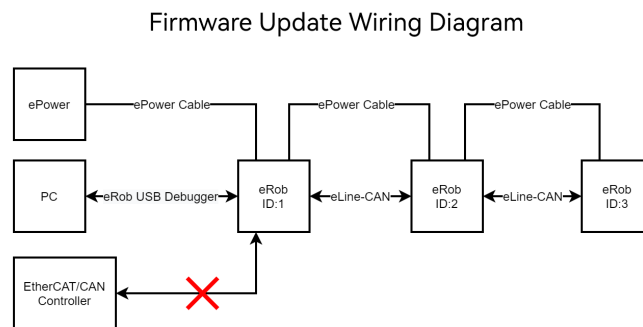
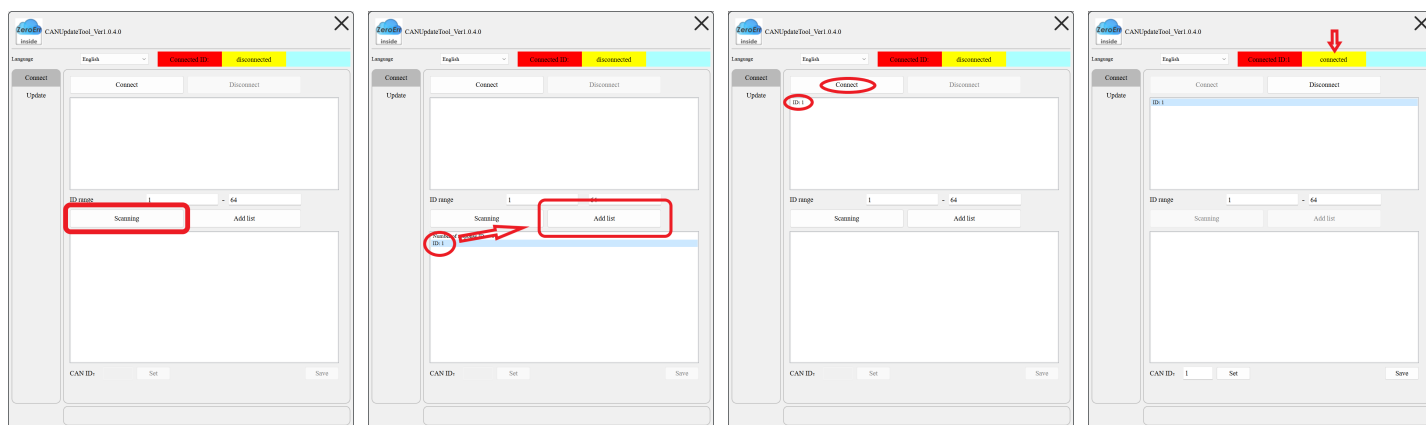


Figure 2-1 Firmware Update Wiring Diagram

- (2) Connect the eRob modules to USB Debugger CAN cable;
- (3) Connect the USB Debugger to the PC;
- (4) Connect the eRob to the DC48V power supply and and turn ON the power.

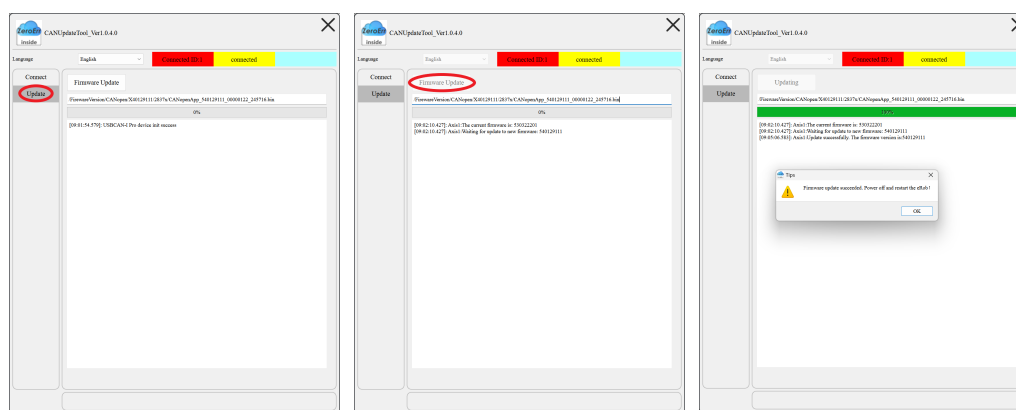
2.2 Step 2: Firmware Upgrade

- (1) Open the CAN_Update_Tool software, click <Scanning>.
- (2) After the eRob module CAN ID scanning is completed, click <Add list>.
- (3) Select the eRob module CAN ID that needs to be upgraded in the list, and click <Connect>.
- (4) The status bar above shows the current connected ID number and "Connected", completing the connection and preparing for firmware upgrade.



(a) Step 1: Scanning (b) Step 2: Add list (c) Step 3: Connect (d) Step 4: Connected
Figure 2-2 Firmware Update Operation Illustration

- (5) After successful connection, click <Update> button on the left to enter the firmware upgrade interface;
- (6) Click <Firmware Upgrade>, wait for the progress bar to reach 100%, and after the prompt pops up here;
- (7) Turn off the module power, and the firmware upgrade is complete.



(a) Step 4: Update (b) Step 5: Firmware Update (c) Update Complete
Figure 2-3 Firmware Update Steps Illustration

2.3 Step 3: Check Update Results

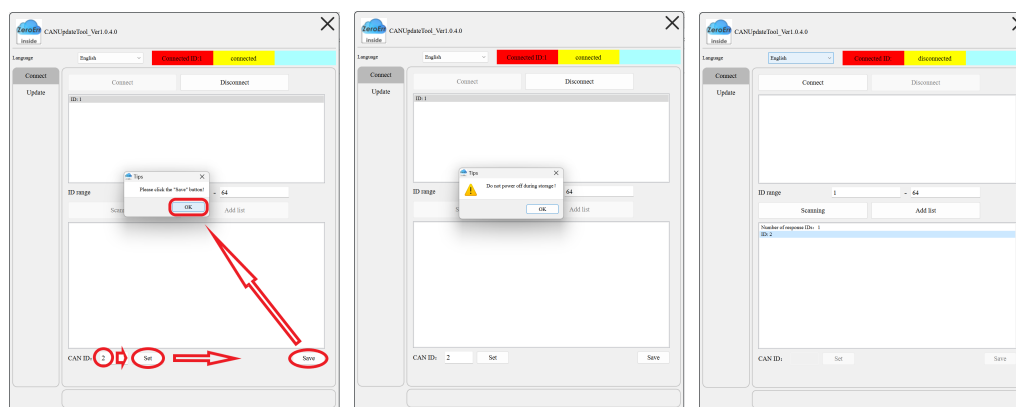
- (1) After the upgrade is completed, close the CAN_Update_Tool software;
- (2) The firmware version information of the eRob module can be viewed by opening the eTunner software, connecting and clicking <Information>;
- (3) Check whether the firmware version is the latest version.

2.4 Error Troubleshoot Steps

If there are errors in module connection or abnormal situations such as the presence of modules with the same CAN ID in the same CAN environment.

Please make sure all eRob module are assigned with different CAN ID, Steps to alter the CAN ID:

- (1) Power OFF the eRob modules, disconnect all CAN connections from the module that require ID alteration;
- (2) Connect the eRob module that require ID alteration to the debugger directly and connect to the computer following [Section 2.1 Step \(1\)](#);
- (3) After successfully connecting the module requires ID alteration to the software, input the CAN ID, click <Set>, then click <Save>;
- (4) Read the prompt and click “OK”.
- (5) Wait for the saving process to complete, after the prompt pops up, power off the module;
- (6) Power ON again, click <Scanning>, at this time the module ID is the changed ID;
- (7) After successful change, connect the remaining eRob modules separately;
- (8) Repeat the above steps to change the CAN ID of each eRob module one by one.



(a) Step 2: Set & Save

(b) Step 3: Prompt

(c) ID Changed Successfully

Figure 2-4 Firmware Update Troubleshooting Steps Illustration

About Us



ZeroErr Control Co.,Ltd was founded in December 2016 in ShenZhen, China. ZeroErr stands for Zero Error Motion Control.

We design, develop and manufacture rotary actuators and encoders which are widely used in automation industry, collaborative robots, surgical robots and bionic robots. More than thousands of customer groups in the global use simple combinations with our products makes wide range of applications.


ZeroErr is committed to providing reliable quality standard production, cost-effective products and quick response technical support, enabling our customers to accelerate innovation, improve productivity and achieve extraordinary application performance.

ZeroErr Control Co.,Ltd

Address:  S9 Building, Zhongrilong Road, Bogang Community, Shajing Street, Bao'an District, ShenZhen City, Guangdong Province, P.R.China

Sales Support:  marketingdirector@zeroerr.cn  +86-13602607132
 overseas_dpt@zeroerr.cn  +86-19166212693

Technical Support:  otss@zeroerr.cn  +86-18922807806

Advice & Complaint:  network@zeroerr.cn

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Visit our website to contact your nearest sales representative.

<https://en.zeroerr.cn>