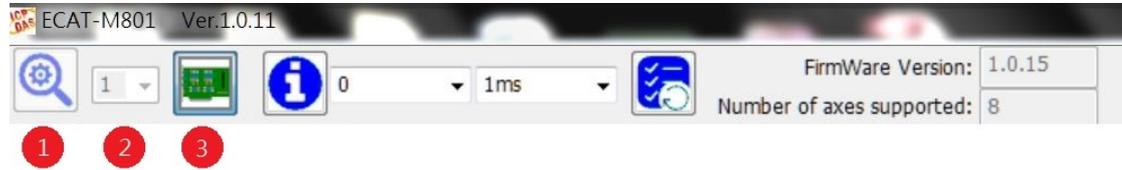


How to use a multi-axis motor driver module on the ECAT-M801?

Take AZD4A- KED as an example

Note: The motor driver module must comply with the CiA402 specification.

### 1.1 Establishing a connection with ECAT-M801

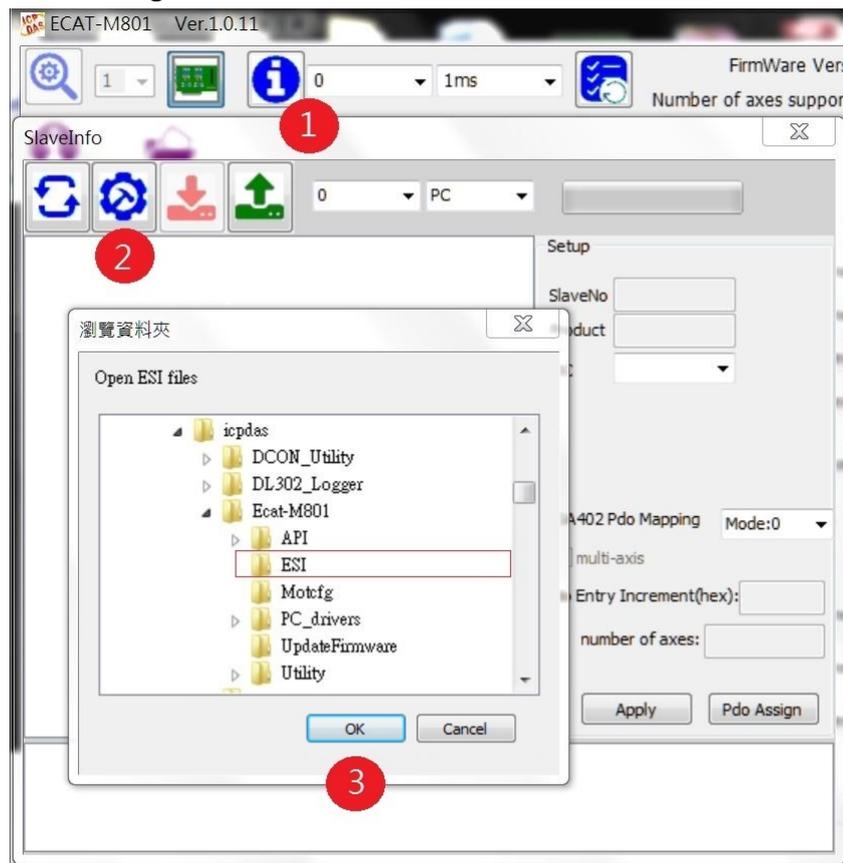


(1) Please confirm FirmWare Version is 1.0.15 or above

(2) Click  to find ECAT-M801

(3) Select the device number  and click  to establish communication with the specified device.

### 1.2 Establishing a slave module network architecture

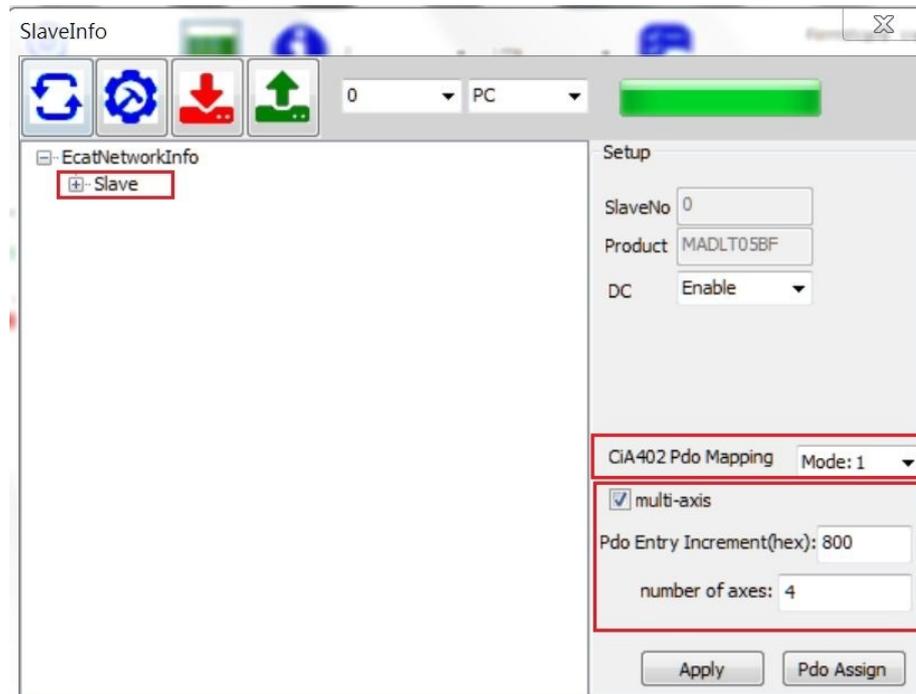


(1) Click  to enter the network architecture editing page

(2) Click  to open the Select ESI file directory dialog, please put the module's

ESI file into the ESI folder.

- (3) Press “OK” to start building the slave module network architecture.



- (4) After building, click **+** Slave, change CiA402 Pdo Mapping to “Mode: 1”

- (5) After building, click **+** Slave, check  multi-axis, enter Pdo Entry Increment :800 and number of axes : 4

Parameter Description:

Pdo Entry Increment: Increment of each Pdo Entry, Explain with Controlword

Index of Controlword of first axis is 6040h

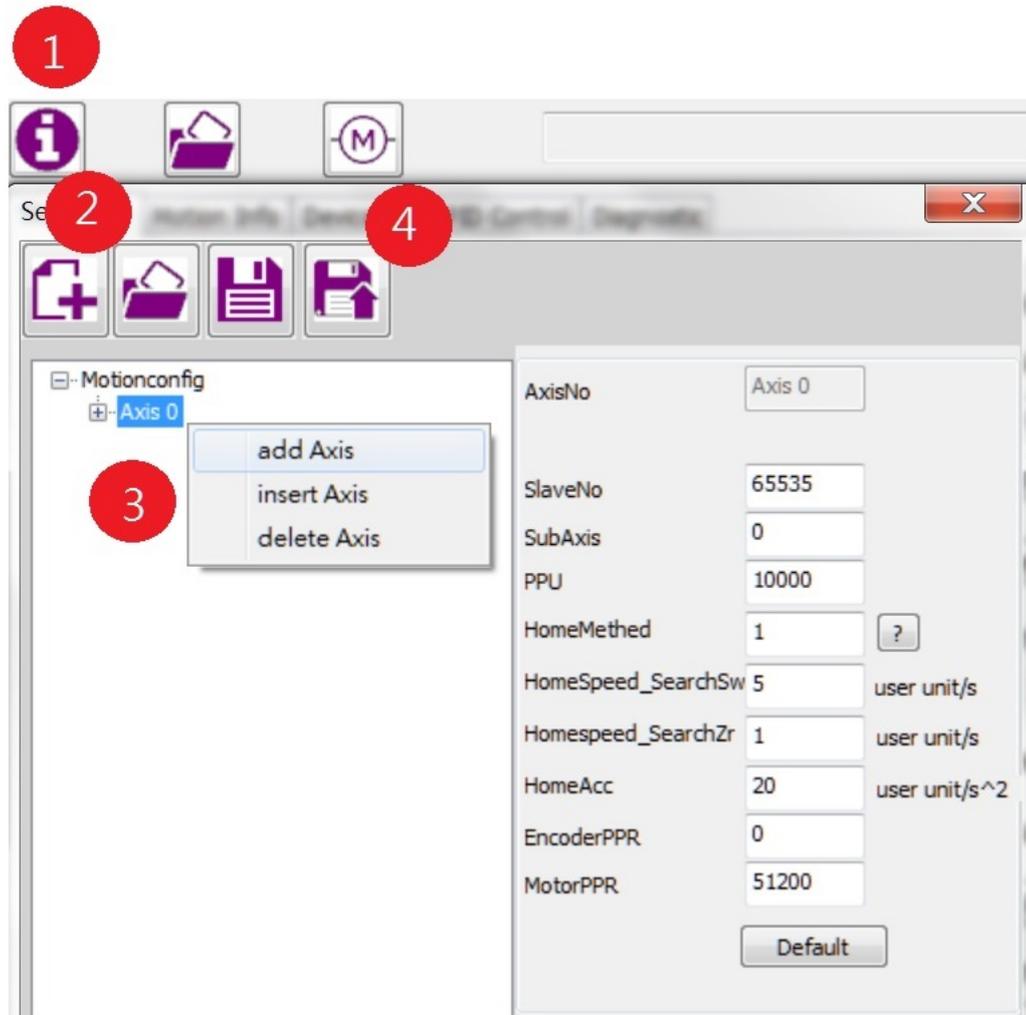
While Index of Controlword of second axis is 6840h, then set to 800

While Index of Controlword of second axis is 7040h, then set to 1000

number of axes: Number of axes supported by the module

- (5) Click  Archive this network architecture

### 1.3 Motion Control Initialization Parameter File Editing Procedure



- (1) click Enter the motion control initialization parameter file editing page
- (2) click Create a new initialization parameter file
- (3) click Axis, The axis parameters can be modified in the right block. Right click on Axis and a menu will appear to add, insert and delete axes.

Parameter description:

SlaveNo: The slave number(connection position) corresponding to the axis number, the axis number is the Axis list order, if required

For the virtual axis, set the SlaveNo to 65535

SubAxis: For multi-axis motor driver modules, set 0 to select the first axis of the driver, set 1 to select the second axis of the driver, and so on

PPU: Pulses Per Unit · pulses of each unit

HomeMethod: Method to find Home

HomeSpeed\_SearchSw : speed of searching Switch

HomeSpeed\_SearchZr: speed of searching index

HomeAcc: accelerations for finding Home

EncoderPPR: How many pulses per revolution of encoder, modules that comply with the CiA402 specification do not need to set this

MotorPPR: How many pulses per revolution of motor, modules that comply with the CiA402 specification do not need to set this

After setting the parameters, click  to save the file.

- 1.4 The remaining steps are the same as other CiA402-compliant drive modules. For instructions, please refer to the third chapter of the [software manual](#).