EC2-C32 series Quick Start

v1.0, Apr. 2023

Packing List

In addition to this guide, the package includes the following items:

EC2-C32

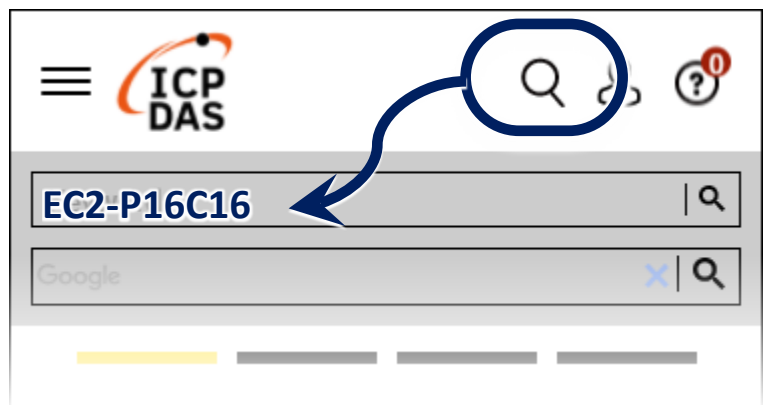## Technical Support

service@icpdas.com

www.icpdas.com

Resources

How to search for ESI, manuals and spec information on ICP DAS website.

- For Mobile Web

- For Desktop Web

Related Information

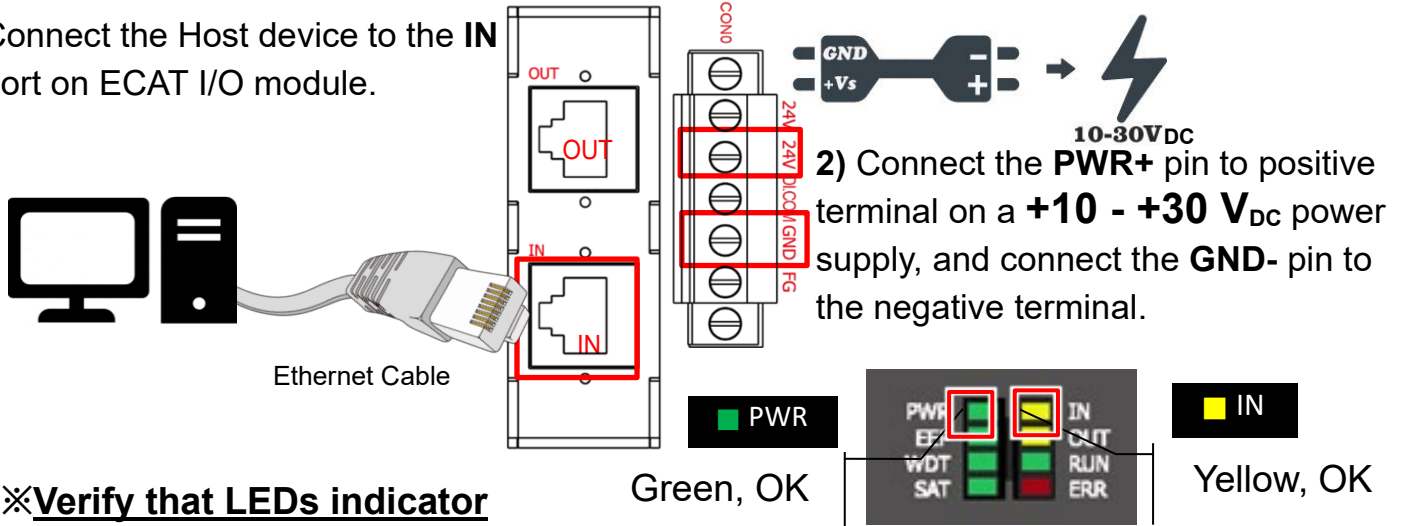For more detailed information related to the manual, hardware manual:

http://www.icpdas.com/en/download/index.php?model=EC2-C32

1 Connecting the Power and Host

※**Switch on module and connect it to an EtherCAT network**

⚠ **NOTE:**

Attaching an ESC directly to an office network will result in network flooding, since the ESC will reflect any frame – especially broadcast frames – back into the network (broadcast storm).

1) Connect the Host device to the **IN** port on ECAT I/O module.

Ethernet Cable

2) Connect the **PWR+** pin to positive terminal on a **+10 - +30 V$_{DC}$** power supply, and connect the **GND-** pin to the negative terminal.

※**Verify that LEDs indicator**

■ PWR   Green, OK

■ IN   Yellow, OK

2 Search Modules

Download and Unzip file to get ESI file

The latest ESI file (**ECx-DIO….xml**) can be downloaded from website at

☁ ECx-DIO_ESI_XML.zip

Unzip the **"ECx-DIO….zip"** to get the **"ECx-DIO….xml"** ESI file(XML format)

Install the ESI file

Copy the **"ECx-DIO….xml"** file to the Master Tools installation folder, as indicated in the table below.

Software	Default Path
Beckhoff EtherCAT Configuration	C:\EtherCAT Configurator\EtherCAT
Beckhoff TwinCAT 3.X	C:\TwinCAT\3.x\Config\Io\EtherCAT
Beckhoff TwinCAT 2.X	C:\TwinCAT\Io\EtherCAT

Run the EtherCAT Master software (Beckhoff TwinCAT 2.X)

Switch on power and execute the TwinCAT System Manager (Config mode)

1. I/O Devices → Right click → Scan Devices…

2. Click **"OK"** button

3. Choose the correct network device which is connected to Module and click **"OK"** button
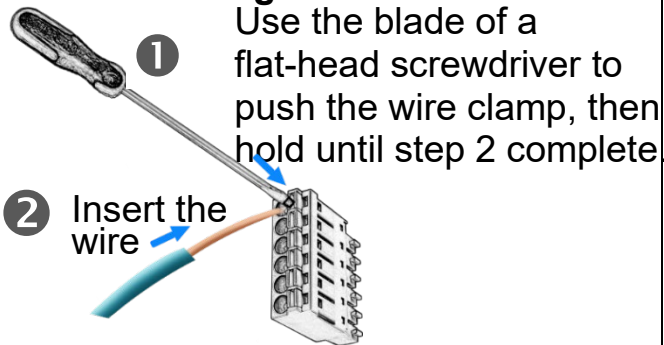
4. Click **"OK"** to start scanning Click **"OK"** to activate the free run mode for TwinCAT system manager

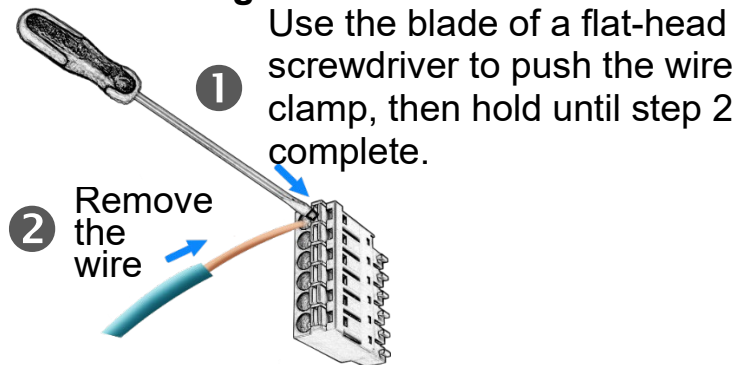**5.** In the left-hand window,Module is now shown in the TwinCAT system Manager

3 Wiring to the Connector
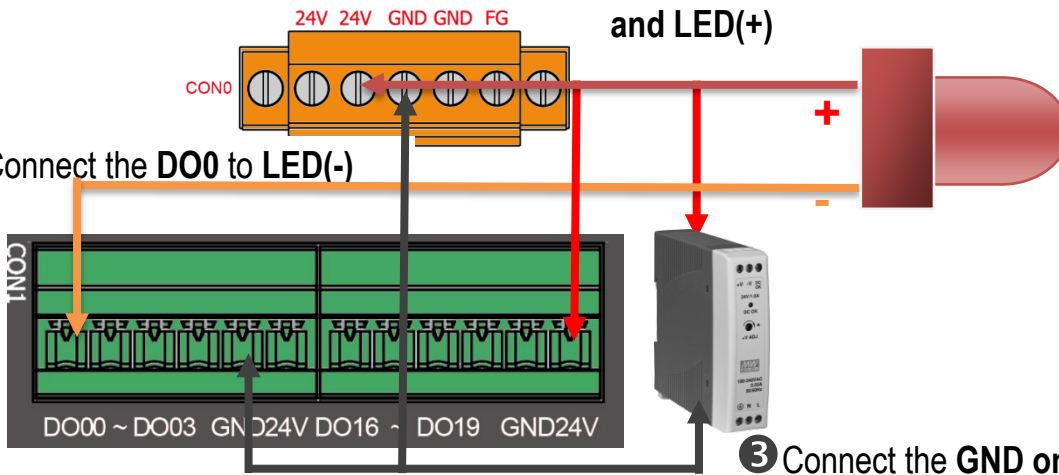
➢ **Wiring Tip**

Connecting the wire

❶ Use the blade of a flat-head screwdriver to push the wire clamp, then hold until step 2 complete.

❷ Insert the wire

Removing the wire

❶ Use the blade of a flat-head screwdriver to push the wire clamp, then hold until step 2 complete.

❷ Remove the wire

➢ Wire Diagrams

DO	Readback as 1 (ON State)	Readback as 0 (OFF State)
Driver Relay	24V DOx GND	24V DOx GND
Resistance Load	24V DOx GND	24V DOx GND

➢ **Wiring the DO0 to LED**

❷ Connect **+24V external power supply** to the **24V and LED(+)**

24V 24V GND GND FG

CON0

❶ Connect the **DO0** to **LED(-)**

+

−

CON1

DO00 ~ DO03 GND 24V DO16 ~ DO19 GND 24V

❸ Connect the **GND on power GND**

➢ **Verifying the DO functionality**
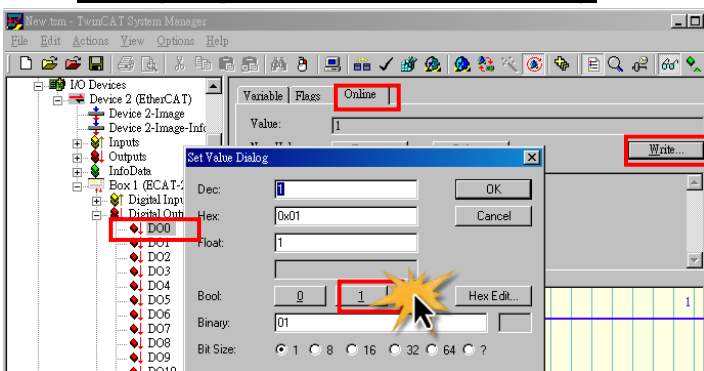
In the left-hand of the window, click on the DO0. In the right-hand of the windows, click the online.
Click Write. Click 1 (Configure DO0).

LED will be lighting