



# ECAT-2045-32 Quick Start

v1.1, November 2017

## 1 Shipping Package

This shipping package contains the following items

1 x ECAT-2000 module

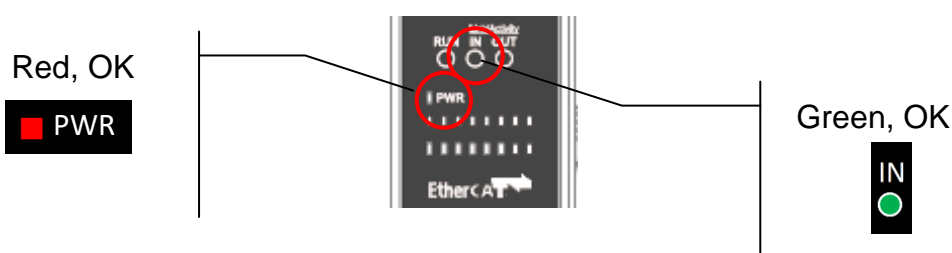
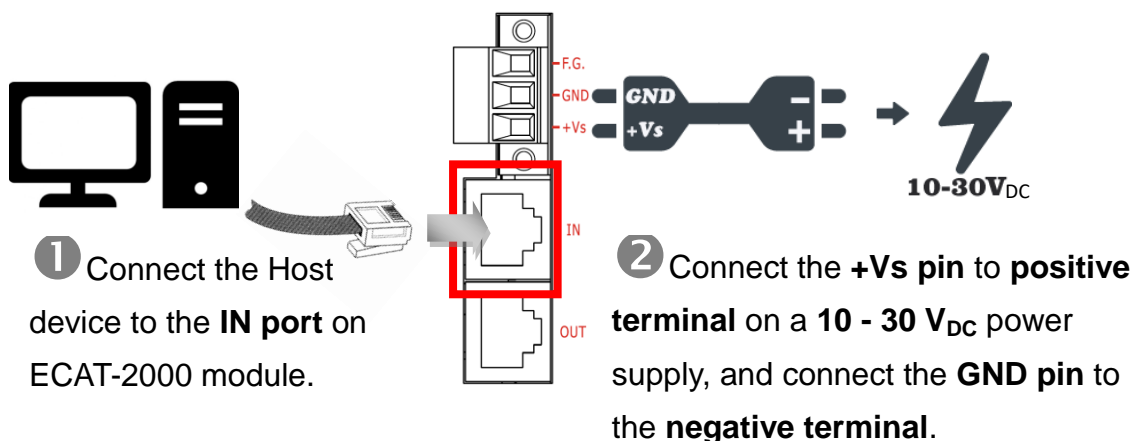


1 x Quick Start (This Document)



## 2 Connecting the Power and Host device

Switch on module and connect it to an EtherCAT network




# 3 Search Modules



## ESI file

The latest **ESI file (ICPDAS ECAT-2000.xml)** can be downloaded from ICP DAS web site at

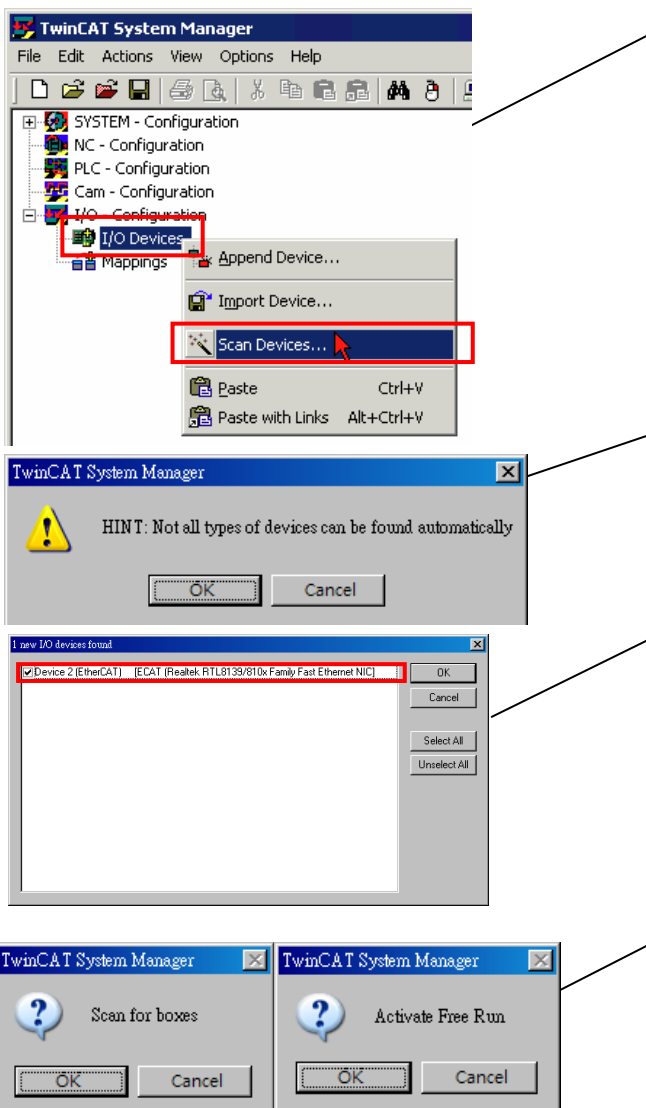
 [http://ftp.icpdas.com/pub/cd/fieldbus\\_cd/ethercat/slave/ecat-2000/software/](http://ftp.icpdas.com/pub/cd/fieldbus_cd/ethercat/slave/ecat-2000/software/)

## Install the ESI file

Copy the “**ICPDAS ECAT-2000.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:\TwinCAT3.x\Config\Io\EtherCAT
Beckhoff TwinCAT 2.X	C:\TwinCAT\Io\EtherCAT

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



Switch on power

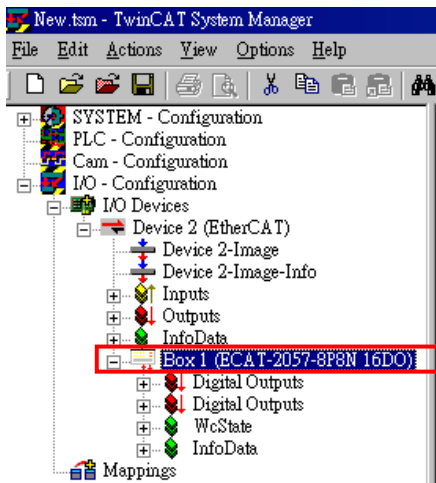
Execute the TwinCAT System Manager(Config mode)

**I/O Devices-> Right click-> Scan Devices...**

Click **OK**

Choose the **correct network device** which is connected to ECAT-2000

Click **Yes** to start scanning and click **Yes** to activate the **free run mode** for TwinCAT system manager

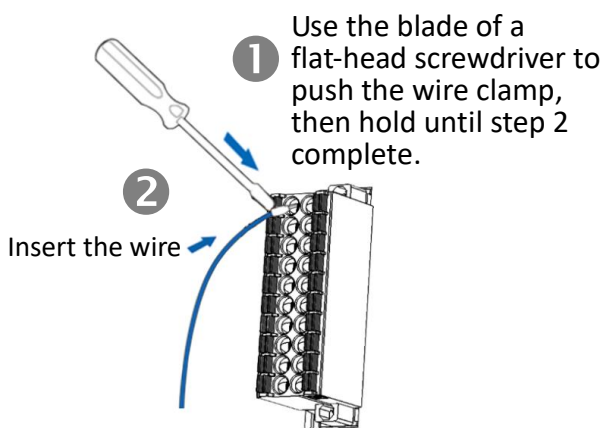


ECAT-2000 is now shown in the TwinCAT system Manager

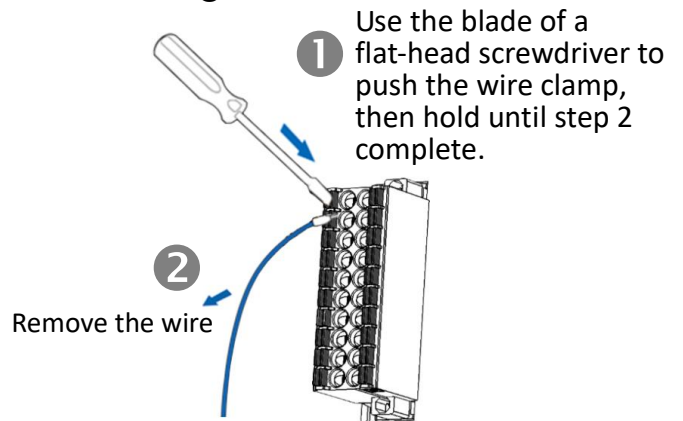
# 4 Wiring to the connector

## Wiring Tip

Connection the wire



Removing the wire

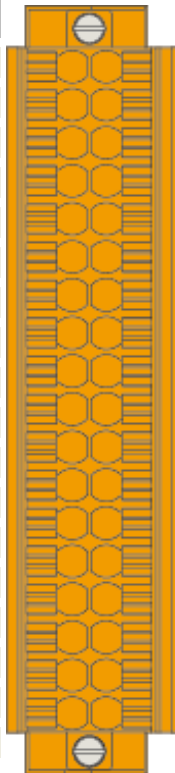


## Wire Diagrams

Output Type	Sink	
	ON State Readback as 1	OFF State Readback as 0
Drive Relay		
Resistance		

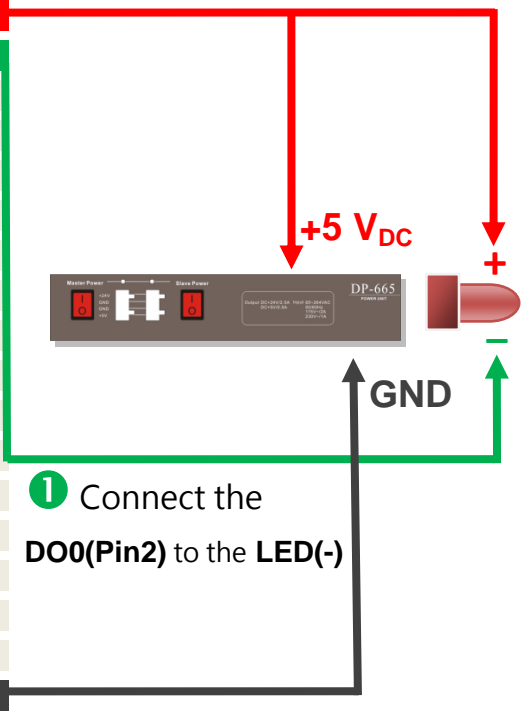
## Wiring the DO

Terminal No.	Pin Assignment
Ext.PWR	19
DO16	20
DO17	21
DO18	22
DO19	23
DO20	24
DO21	25
DO22	26
DO23	27
DO24	28
DO25	29
DO26	30
DO27	31
DO28	32
DO29	33
DO30	34
DO31	35
Ext.GND	36



Pin Assignment	Terminal No.
1	Ext.PWR
2	DO0
3	DO1
4	DO2
5	DO3
6	DO4
7	DO5
8	DO6
9	DO7
10	DO8
11	DO9
12	DO10
13	DO11
14	DO12
15	DO13
16	DO14
17	DO15
18	Ext.GND

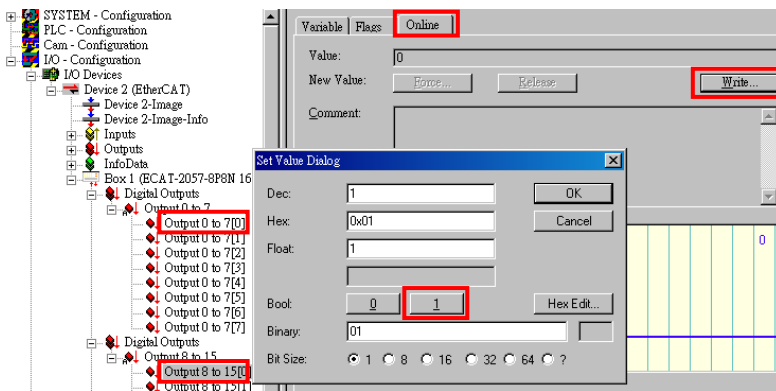
**2** Connect **+5V external power supply** to the **LED(+)** and **EXT.PWR(pin1)**



**1** Connect the **DO0(Pin2)** to the **LED(-)**

**3** Connect the **GND on external power supply** to the **EXT.GND(Pin18)**

## Verifying the DO functionality



Click **Output 0 to 7** and click **Output 0 to 7[0]** in the left-hand window.  
 Click **online** in the right-hand window.  
 Click **Write**.  
 Click **1 (Configure DO0 to Logic1)**.



LED is lighting.



## Related Information

Product Page:

[http://www.icpdas.com/root/product/solutions/industrial\\_communication/fieldbus/ethercat/io\\_module/ecat-2045-32.html](http://www.icpdas.com/root/product/solutions/industrial_communication/fieldbus/ethercat/io_module/ecat-2045-32.html)

Documentation:

[ftp://ftp.icpdas.com/pub/cd/fieldbus\\_cd/ethercat/slave/ecat-2000/](ftp://ftp.icpdas.com/pub/cd/fieldbus_cd/ethercat/slave/ecat-2000/)

ESI file:

[http://ftp.icpdas.com/pub/cd/fieldbus\\_cd/ethercat/slave/ecat-2000/software/](http://ftp.icpdas.com/pub/cd/fieldbus_cd/ethercat/slave/ecat-2000/software/)

DP-665(Optional) Product Page:

[http://www.icpdas.com/products/Accessories/power\\_supply/dp-665.htm](http://www.icpdas.com/products/Accessories/power_supply/dp-665.htm)