

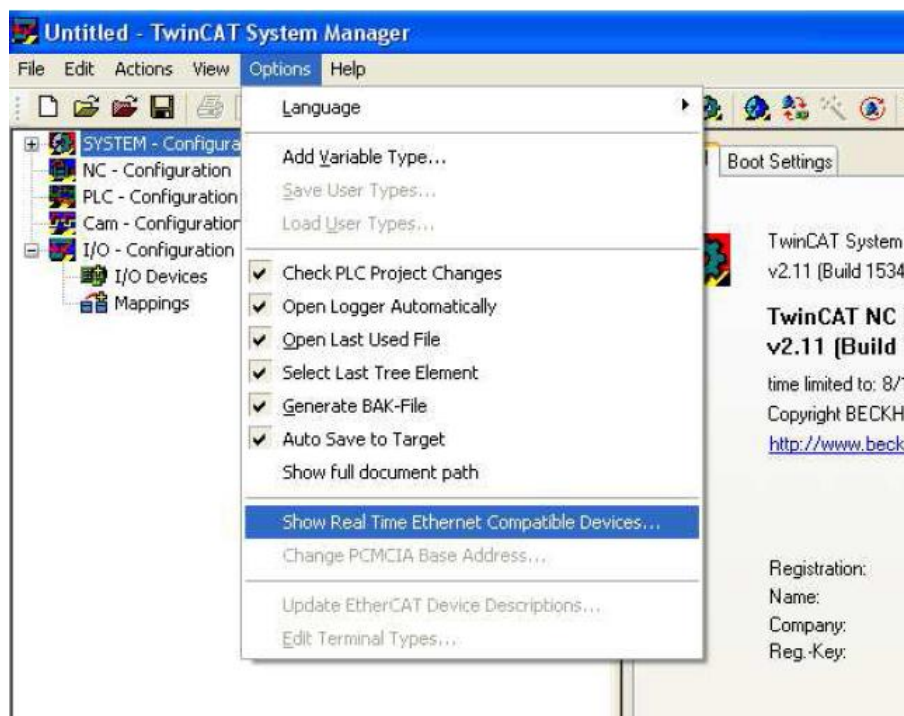
Introduction

This article explains how to connect the R88D-KN drive with EtherCAT directly to a PC with TwinCAT installed. Following the instructions will allow you to control the drive using TwinCAT software.

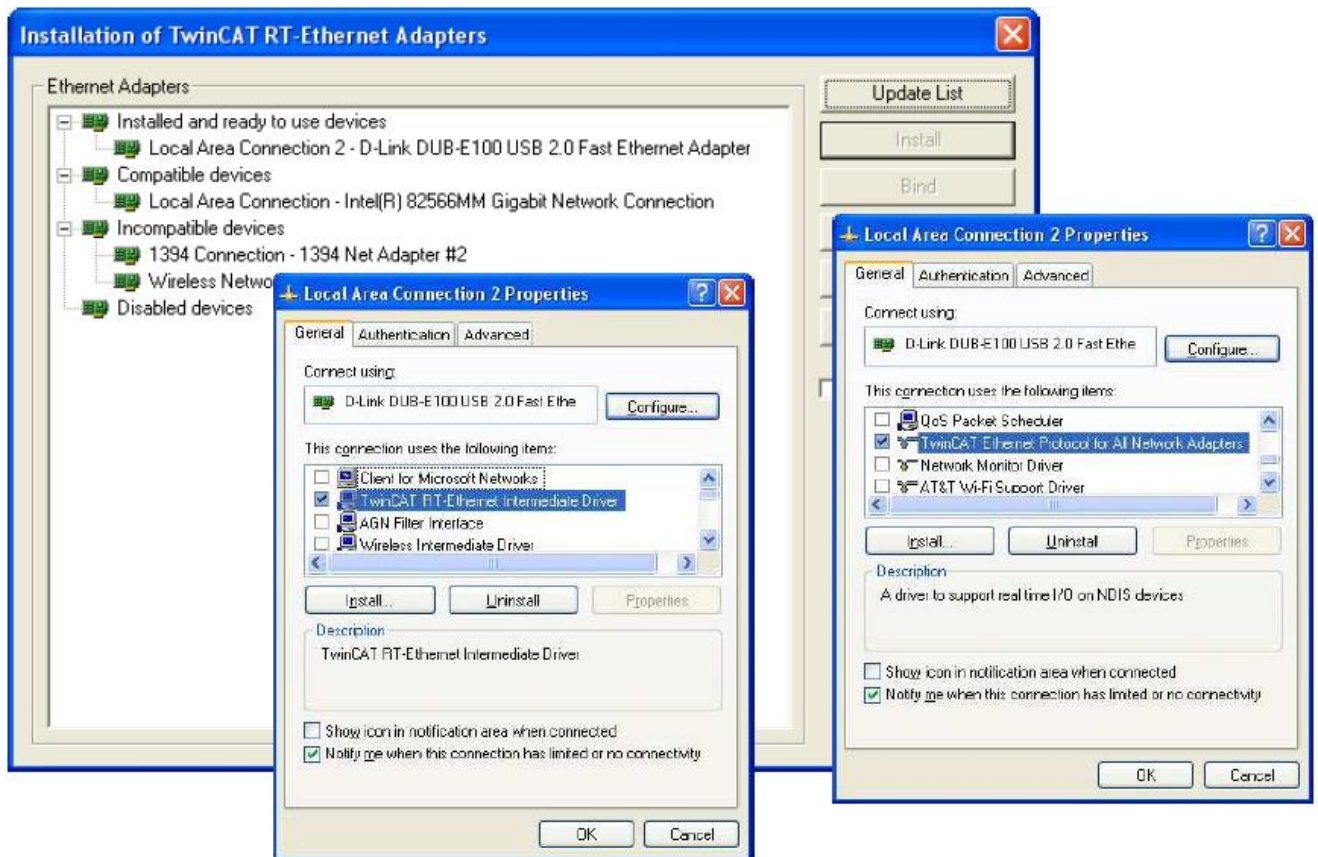
Method

To control your R88D-KN drive using TwinCAT software:

- Install TwinCAT
- Copy the attached XML file to the TwinCAT directory (default at C:\TwinCAT\Io\EtherCAT)
- Start TwinCAT System Manager, Select Option -> 'Show Realtime Ethernet Compatible Devices...':



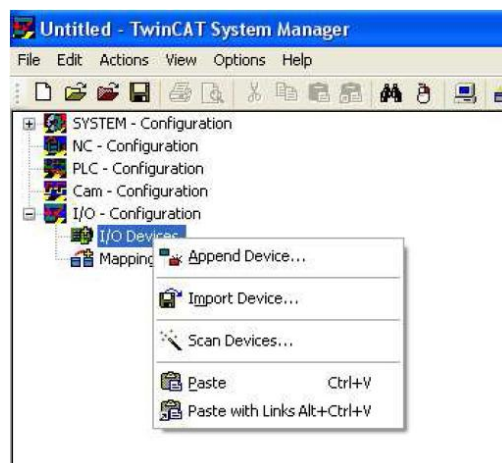
- Install the Ethernet adapter to use for EtherCAT. In the Connection Properties window select only the TwinCAT Driver and Protocol:



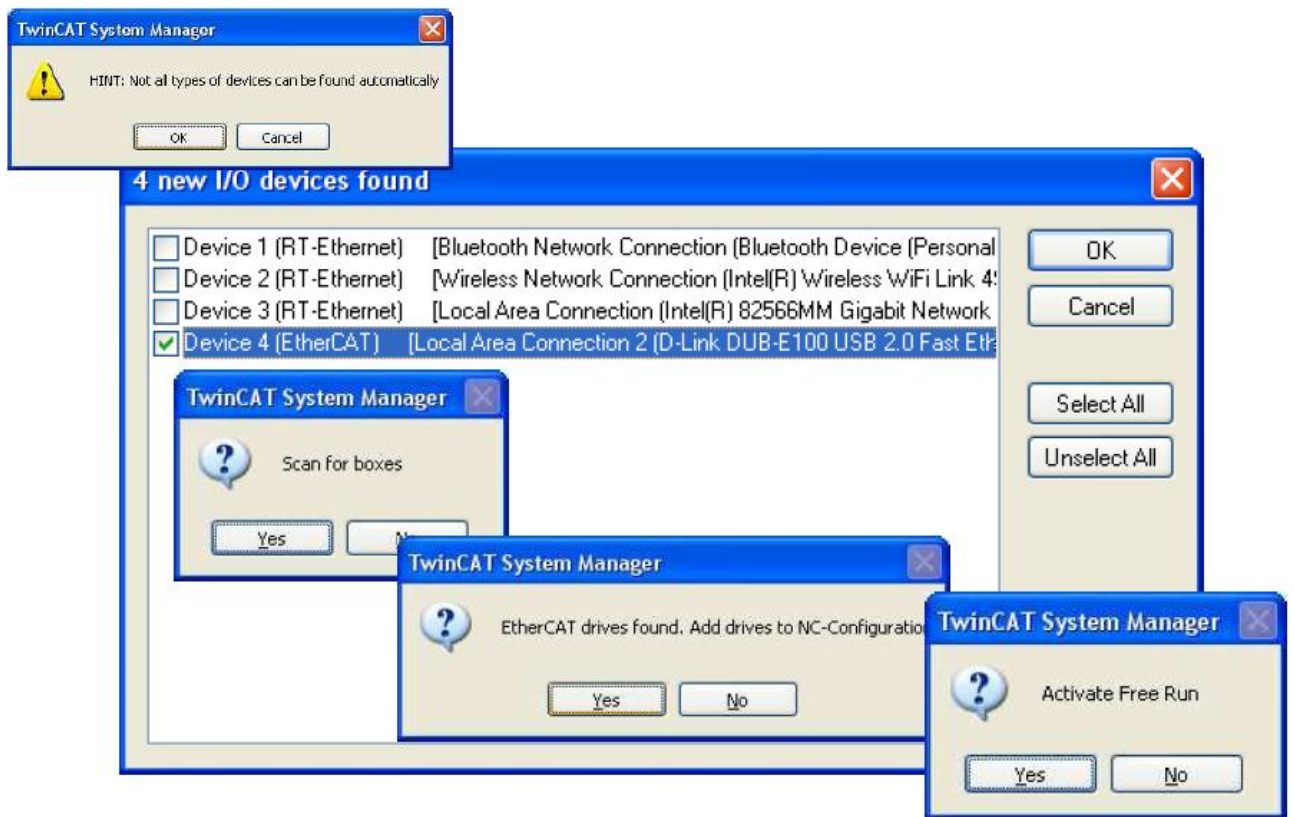
- Connect with CX-Drive and configure your basic settings for the Drive:

...	Index	OD	Description	Value	Drive Value	Default	Range	Units	Restart Po
▶	Pn400.0	3400.00	Input Signal Selection 1 - Position control/full closing control	0: Disabled (Disabled) ...	---	94	0 to FF	Hex	☑
▶	Pn400.1	3400.00	Input Signal Selection 1 - Speed control	0: Disabled (Disabled) ...	---	94	0 to FF	Hex	☑
▶	Pn400.2	3400.00	Input Signal Selection 1 - Torque control	0: Disabled (Disabled) ...	---	94	0 to FF	Hex	☑
▶	Pn401.0	3401.00	Input Signal Selection 2 - Position control/full closing control	0: Disabled (Disabled) ...	---	81	0 to FF	Hex	☑
▶	Pn401.1	3401.00	Input Signal Selection 2 - Speed control	0: Disabled (Disabled) ...	---	81	0 to FF	Hex	☑
▶	Pn401.2	3401.00	Input Signal Selection 2 - Torque control	0: Disabled (Disabled) ...	---	81	0 to FF	Hex	☑
▶	Pn402.0	3402.00	Input Signal Selection 3 - Position control/full closing control	0: Disabled (Disabled) ...	---	82	0 to FF	Hex	☑
▶	Pn402.1	3402.00	Input Signal Selection 3 - Speed control	0: Disabled (Disabled) ...	---	82	0 to FF	Hex	☑
▶	Pn402.2	3402.00	Input Signal Selection 3 - Torque control	0: Disabled (Disabled) ...	---	82	0 to FF	Hex	☑

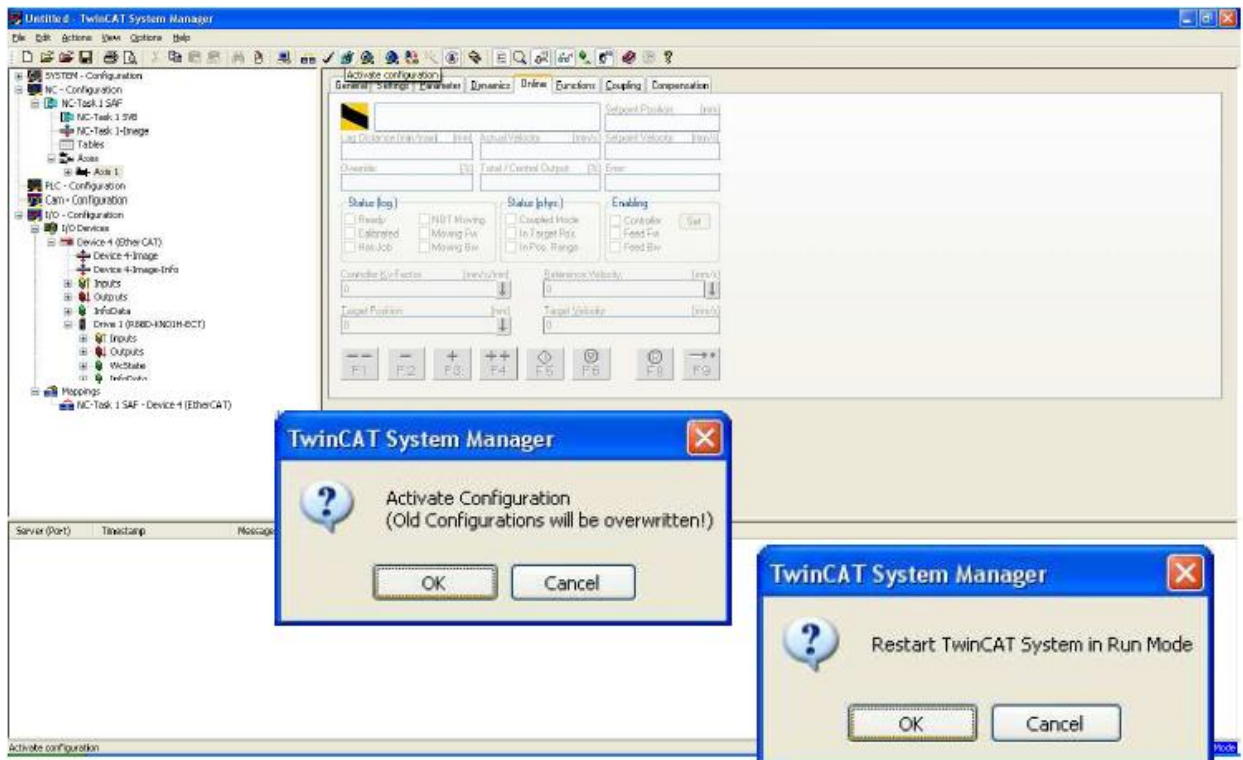
- Connect the Drive with the EtherCAT adapter
- In the left basic field select I/O – Configurations -> I/O Devices -> Scan Devices:



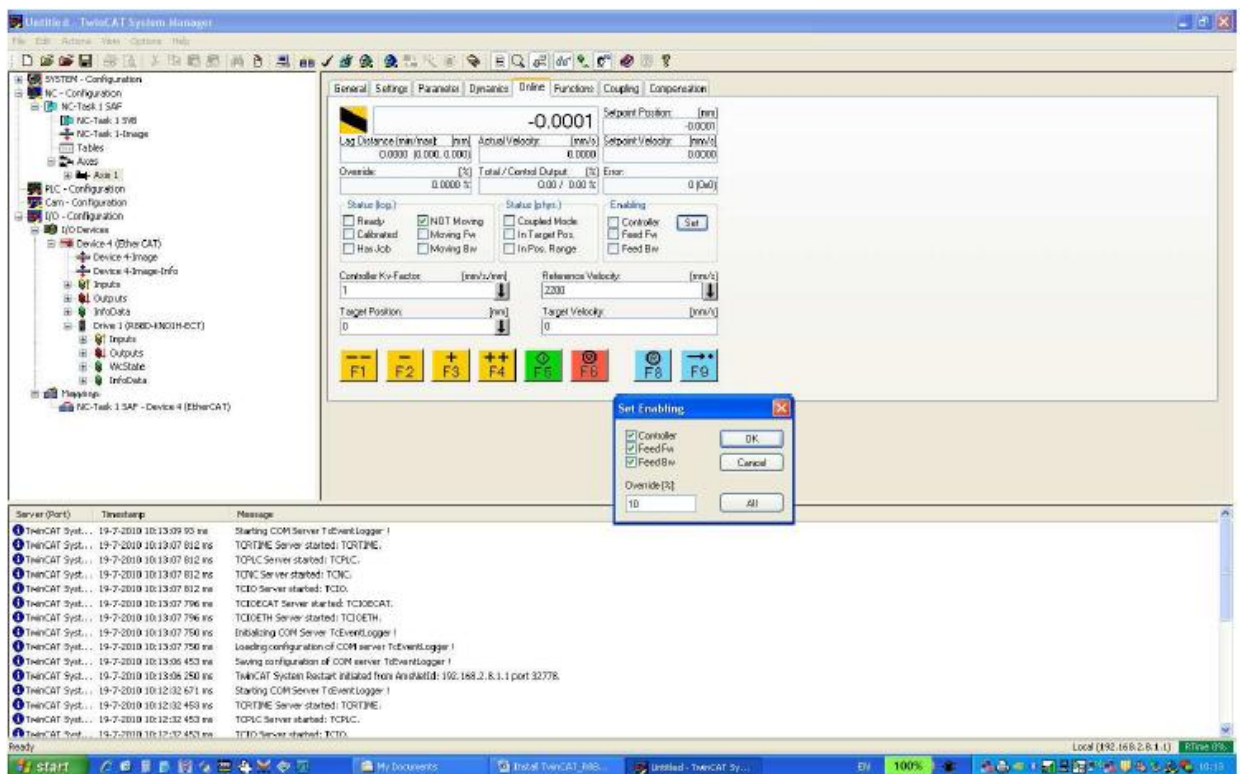
- Reply with OK for 'Not all types of devices can be found automatically'. Select the device for use with EtherCAT, reply with OK for 'Scan for boxes', 'EtherCAT drives found. Add drives to NC-Configuration' and 'Active Free Run':



- In the left basic field select NC-Configurations -> NC-Task 1 SAF -> Axes -> Axis1
- Click on Online tab, on the top click on the 'Activate configuration', confirm OK to 'Activate Configuration' and the 'Restart TwinCAT System in Run Mode':



- Click on 'Set' (right box) from the Enabling section, in the Set Enabling activate Controller, Feed Fw, Feed Bw, fill in 10% at Override and end with OK:



- Move with the function keys.....

Used versions:

- TwinCAT NC1 v2.11 (Build 1539)
- CX-Drive 2.1.0.9
- Omron_R88D-KNxxx-ECT_v1.0x_20100201.xml

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Fuente: <http://www.myomron.com>