

Connecting UniOP and CyBro-2

TN-001 rev. 02

applies to CyPro 2.2.0 and Designer 6.03 and later



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Introduction

This document contains instructions how to connect CyBro-2 and UniOP operator panel. Connection is made using UniOP A-bus driver.

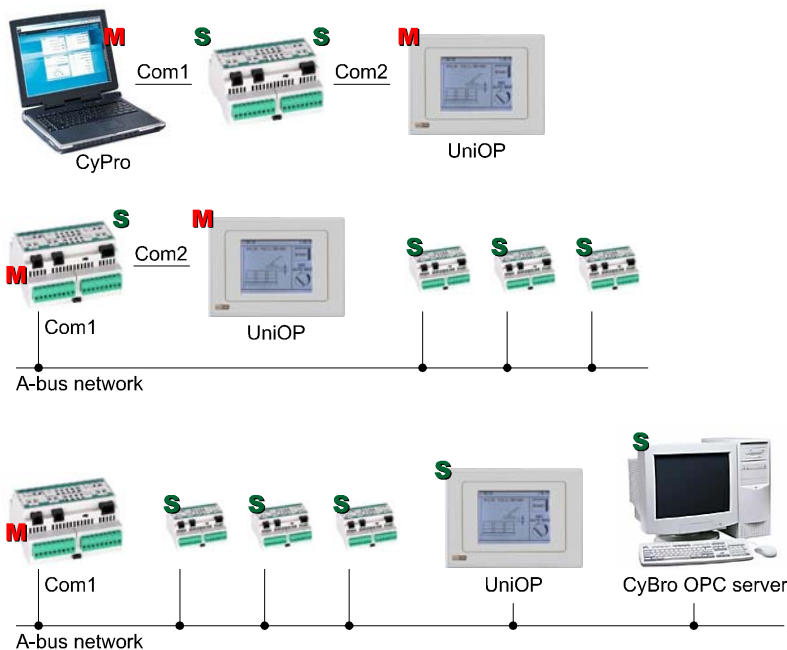
Hardware requirements:

- CyBro-2
- UniOP
- CyBro programming cable (PC-CyBro, CAD-PP-P2)
- UniOP programming cable (PC-UniOP)
- CyBro-UniOP communication cable (see appendix)

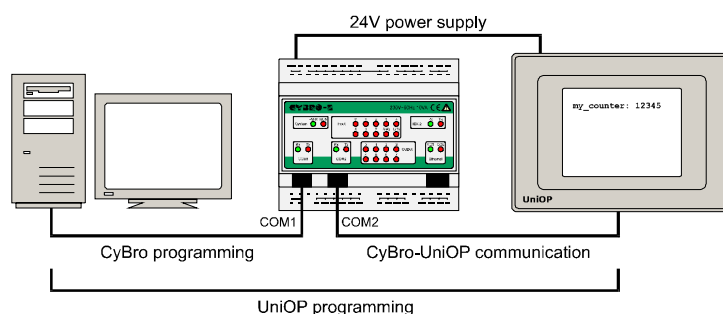
Software requirements:

- CyPro 2.2.0 or later
- UniOP Designer 6.03 or later
- CyBro A-bus driver for Designer (D32Uplc907.dll)

Network consists of one master and several slave devices. UniOP work both in master and slave configuration. Some examples are shown below. "M" is network master, "S" is network slave.



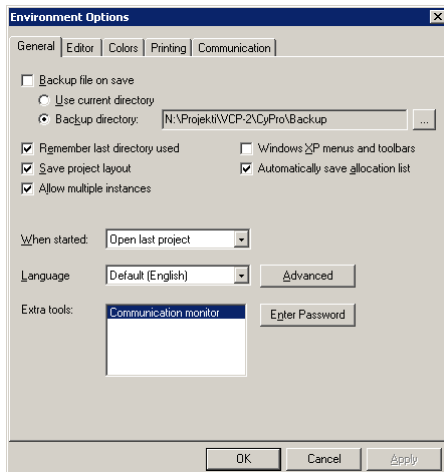
In following example, one CyBro and one UniOP are used. PC is connected to CyBro Com1 and UniOP is connected to CyBro Com2. UniOP uses power from CyBro 24V power supply output.



UniOP is set to address 100, and CyBro has network address 4247. UniOP is network master.

CyPro configuration

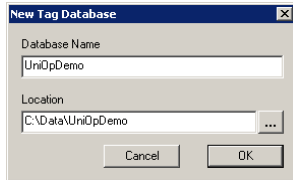
1. Open **Hardware Setup**, start **Autodetect**.
2. Write a PLC program.
3. Make sure that **Tools/Environment Options/Automatically save allocation list** is checked.



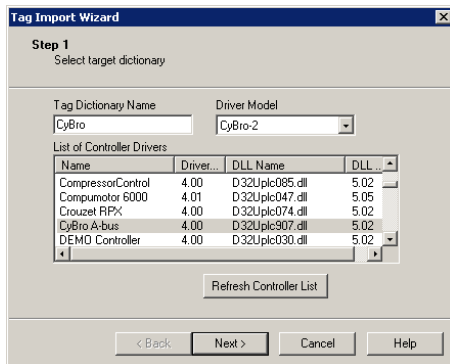
4. **Save** project (Ctrl-S), **Send** program (F9) and **Start** CyBro (F11).

Designer configuration

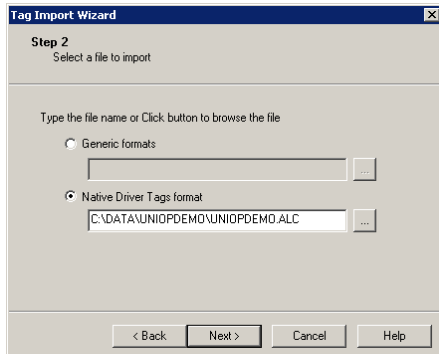
1. Open Designer and create a new project.
2. Start **Tools/Tag Editor** and create a new tag database:



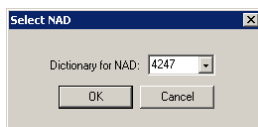
Start **File/Import Tags** wizard, and create a new dictionary:



Select native tag format, and open ("...") the allocation file:



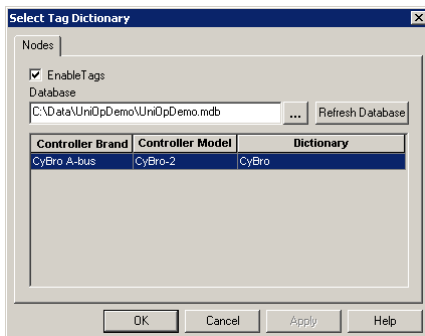
After wizard finishes, select CyBro NAD:



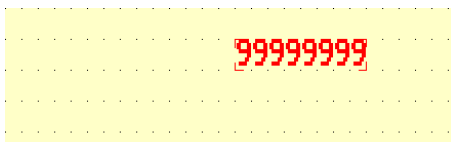
3. Go back to Designer.

Start **Project/Configure Tag Dictionaries**.

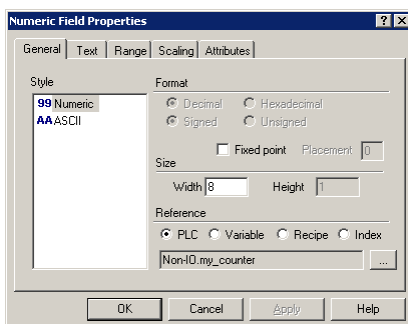
Check "Enable Tags" and open ("...") tag database:



4. Put a numeric field on the page:

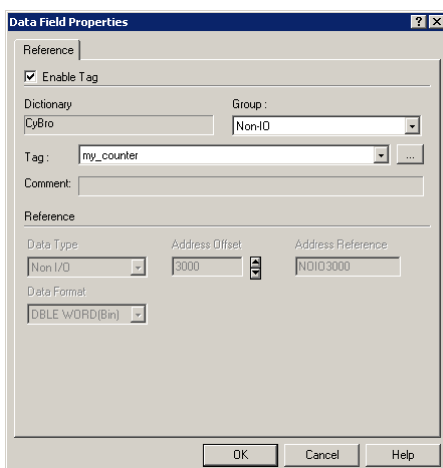


Right-click to field and select properties:

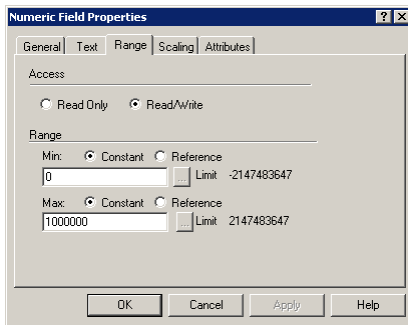


Press browse button ("...") to get data field properties.

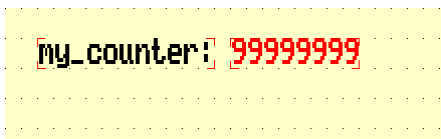
Check Enable Tag, select Non-IO group, choose my_counter tag. Data type, offset, reference and format are selected automatically.



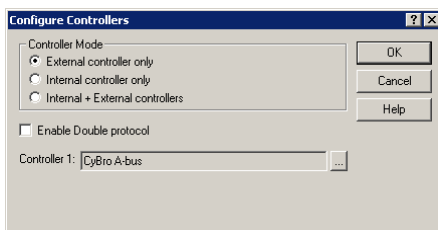
Back to numeric field properties. Select Range tab, set access to Read/Write, and set editing range:



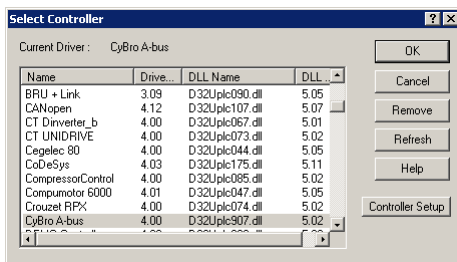
5. Put a text field. Page now looks like this:



6. Open Project/Configure Controller:

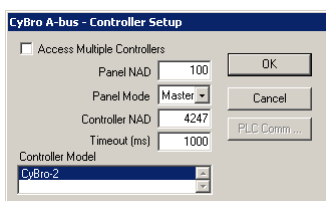


Press browse button ("...") to get Select Controller dialog box:

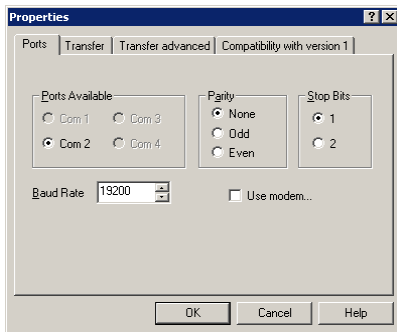


Press Controller Setup button.

Set Panel NAD to 100, Panel Mode to Master, and Controller NAD to match your CyBro (4247 in our example). Leave Timeout to 1000ms.

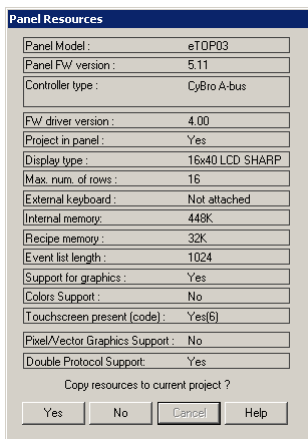


7. Open **Transfers/Options** and select communication port and baudrate. For more details, please refer to your UniOP manual.

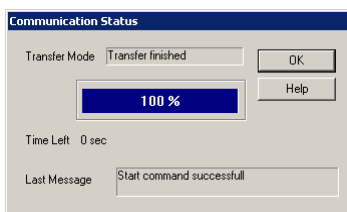


8. Put terminal into configuration mode.

9. Open **Transfers/Get Panel Resources**, wait until resources are read, then press Yes to copy resources to current project. Now it may be a right time to save the project.



10. Start **Transfers/Download**. Project is downloaded to UniOP, and automatically started:



Connect UniOP to CyBro.

The counter is running, and value can be changed using UniOP.

Appendix

CyBro-UniOP communication cable

CyBro side:

RJ-09 (looking into the jack, cable extending up)



UniOP side:

DB15, two row, female



Connections:

CyBro RJ9		UniOP DB15	
signal	pin no.	signal	pin no.
TxD	1	RxD	2
RxD	2	TxD	3
n.c.	3	-	-
GND	4	GND	5