



## **Basic Connectivity Settings for**

### **Using Kepware's OPC server & User-Configurable driver (U-CON)**

to communicate with a [ BetaBrite display ]

03/19/08

#### **Required Resources**

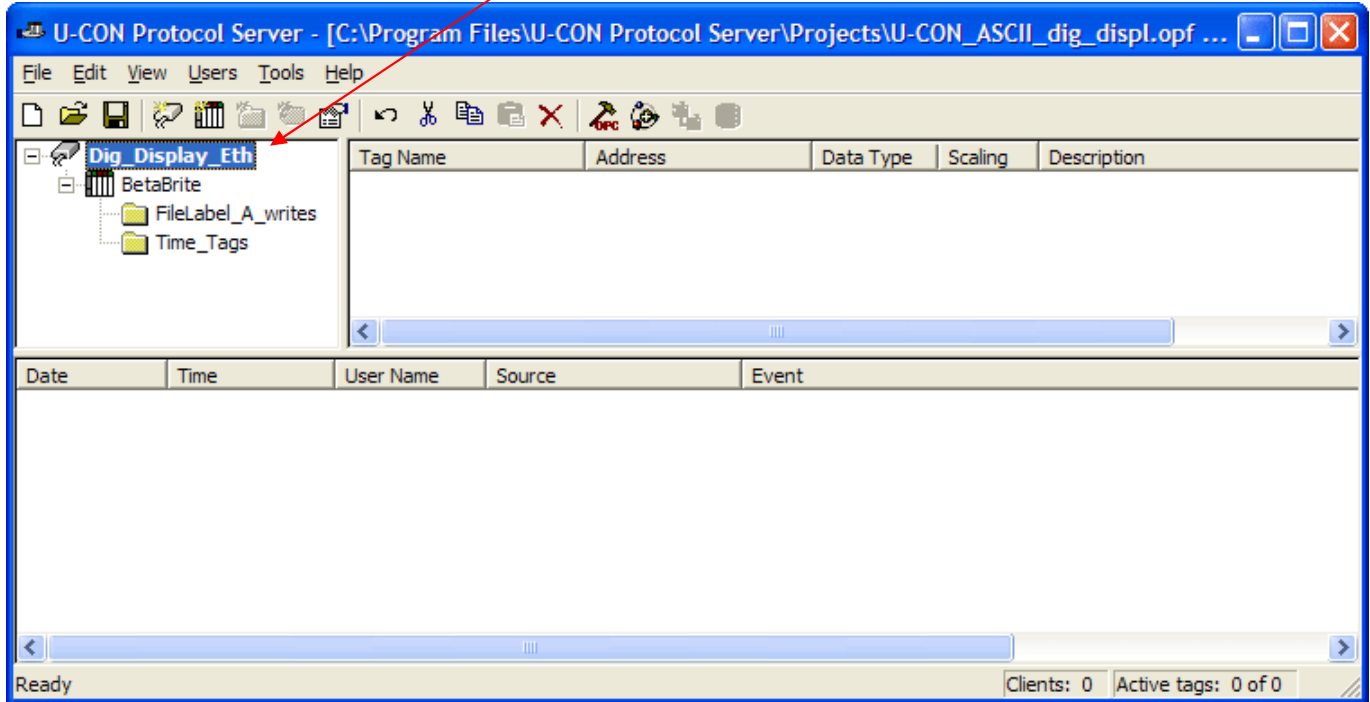
- U-CON Protocol Server or KEPServerEX with User-Configurable Driver plug-in
- Digital display / sign supporting Alpha ASCII protocol by Adaptive Microsystems
- U-CON sample project (brief sample)
- Serial or Ethernet hardware to connect your Windows PC to the sign.
- For profile enhancement the complete Alpha protocol document would be needed.

#### **Basic Actions Covered**

- Edit Channel settings for Serial connectivity
- Edit Device Settings for Ethernet connectivity
- Launch the Transaction Editor
- Launch the OPC Quick Client

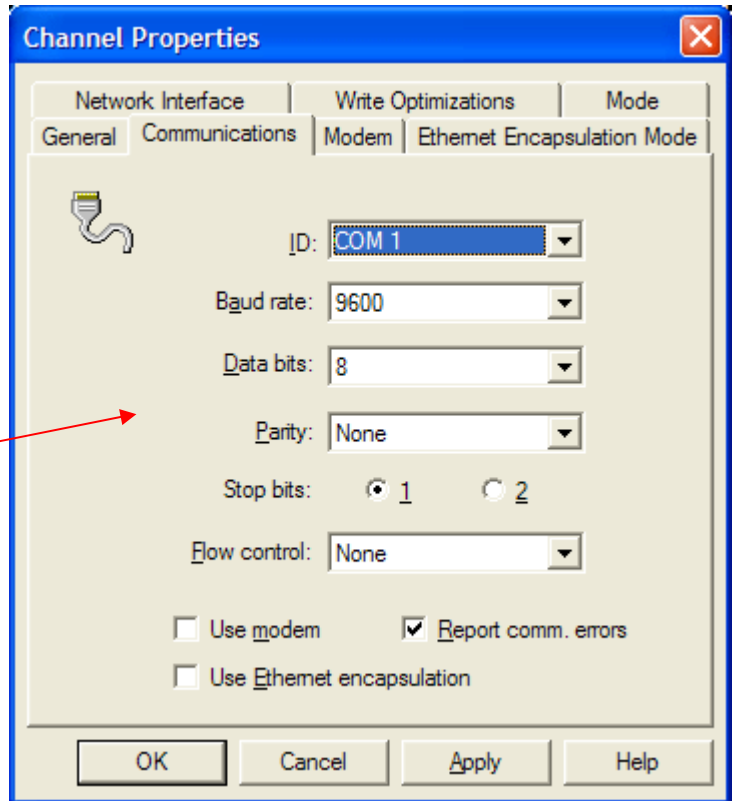
## After opening the .opf project file, Edit the Channel Properties

Double-click the Channel  
to edit Channel properties



## For Serial Connectivity to your digital display

Confirm that the Communications Settings match the settings in the sign.  
  
Vendor hw manual should contain default sign comms parameters.

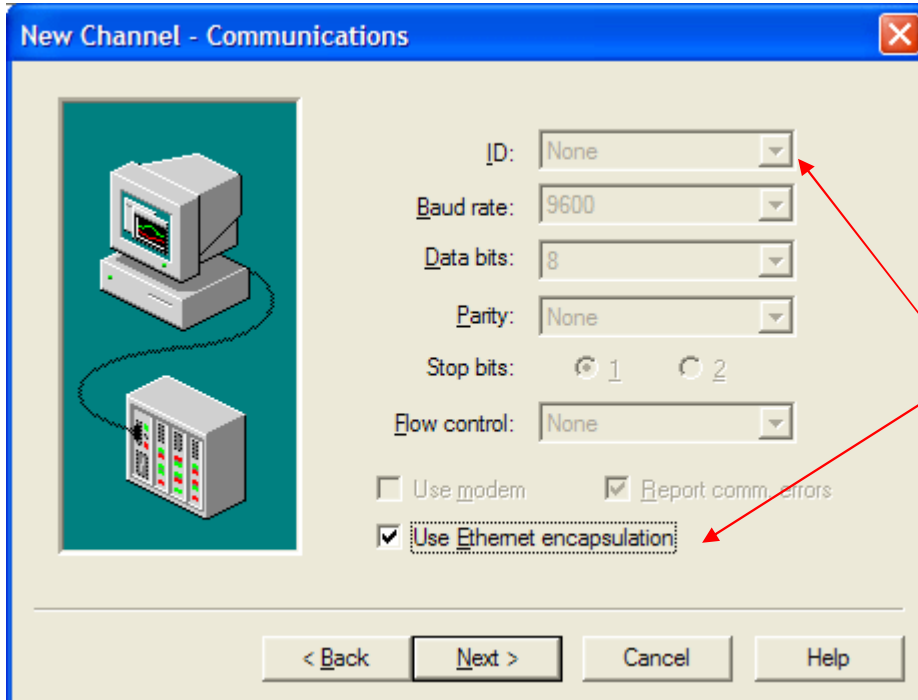


The **Channel Properties** dialog box is shown with the **Communications** tab selected. The settings are as follows:

- ID:** COM 1
- Baud rate:** 9600
- Data bits:** 8
- Parity:** None
- Stop bits:** 1 (selected)
- Flow control:** None
- ☐ Use modem
- ☒ Report comm. errors
- ☐ Use Ethernet encapsulation

Buttons at the bottom: OK, Cancel, Apply, Help.

## For Ethernet connectivity



The **New Channel - Communications** dialog box is shown. The settings are as follows:

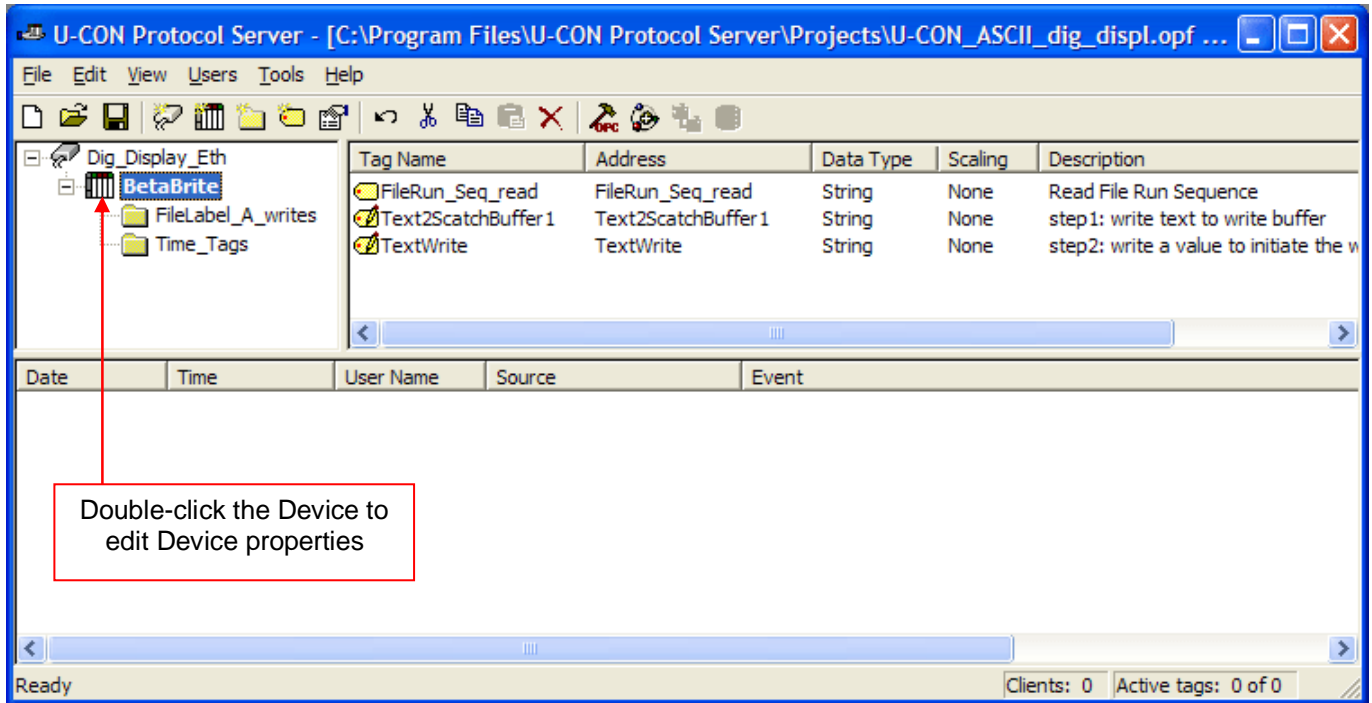
- ID:** None
- Baud rate:** 9600
- Data bits:** 8
- Parity:** None
- Stop bits:** 1 (selected)
- Flow control:** None
- ☐ Use modem
- ☒ Report comm. errors
- ☒ Use Ethernet encapsulation

Buttons at the bottom: < Back, Next >, Cancel, Help.

Choose "None" for the Comm port ID

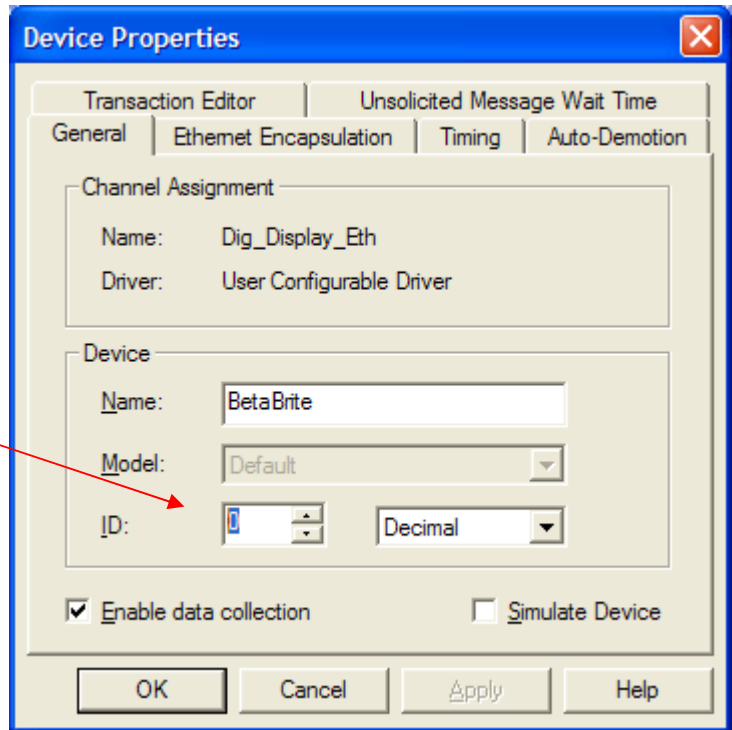
Then check the "Use Ethernet encapsulation" option.

## Next Edit Device Properties



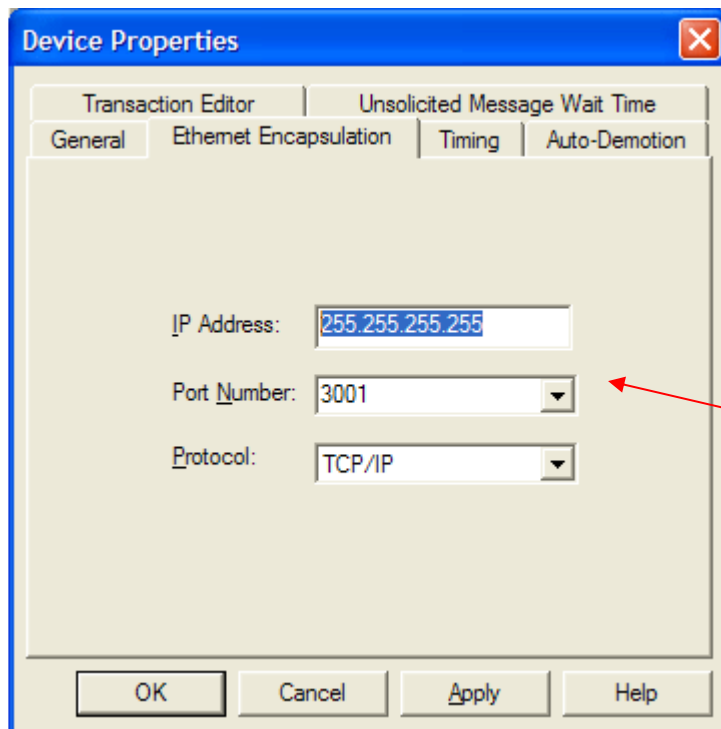
## For Serial connectivity

Set the Device ID  
To match the setting  
in your sign.



The 'Device Properties' dialog box is shown with the 'General' tab selected. The 'Channel Assignment' section shows 'Name: Dig\_Display\_Eth' and 'Driver: User Configurable Driver'. The 'Device' section shows 'Name: BetaBrite', 'Model: Default', and 'ID: 1' (with a 'Decimal' dropdown). The 'Enable data collection' checkbox is checked, and the 'Simulate Device' checkbox is unchecked. Buttons at the bottom include 'OK', 'Cancel', 'Apply', and 'Help'.

## For Ethernet connectivity



The 'Device Properties' dialog box is shown with the 'Ethernet Encapsulation' tab selected. The 'IP Address' field is set to '255.255.255.255', the 'Port Number' dropdown is set to '3001', and the 'Protocol' dropdown is set to 'TCP/IP'. Buttons at the bottom include 'OK', 'Cancel', 'Apply', and 'Help'.

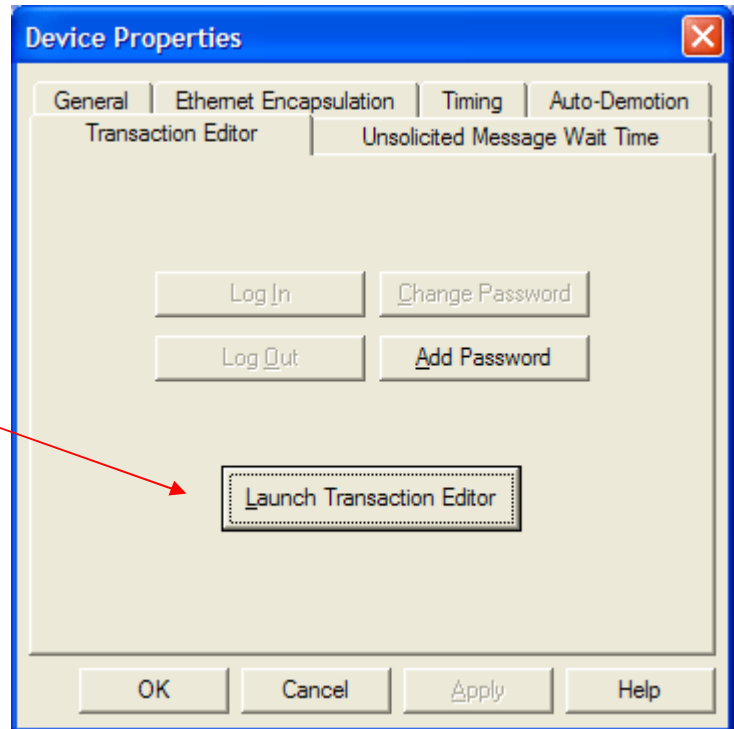
Set the IP and Port  
To match settings in the  
serial to Ethernet adapter  
used with your sign.

## To Edit or Add custom transactions

From Device Properties  
then Transaction Editor tab

Click the "Launch" button

...Refer to the U-CON driver  
help file or Users Manual for  
additional info on using the  
Transaction Editor interface.



## To Test your Connection

