

## Setup Instructions for KVB Sample Project:

### KVB\_Sample\_AKD\_240SP3

#### About this Sample Project

The KVB project “KVB\_Sample\_AKD\_240SP3” is intended to be used with KVB version 2.40 Service Pack 3 and the AKD-P drive.

This project was tested with AKD firmware 1-21-01-000.

#### Topics

- Change HMI model
- Configure IP address of the drive
- Configure Modbus units
- Drive setup in Workbench

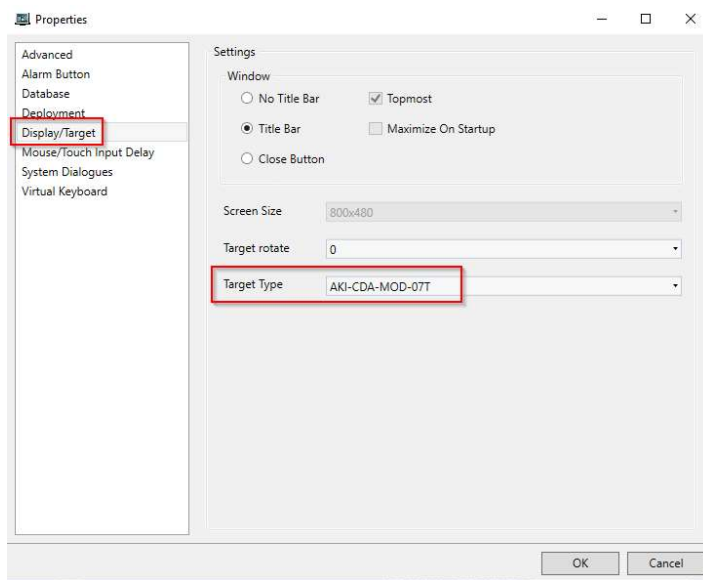
#### Change AKI/AKI2G HMI Model

In order to download the KVB project to the HMI panel, you must select the appropriate panel model.

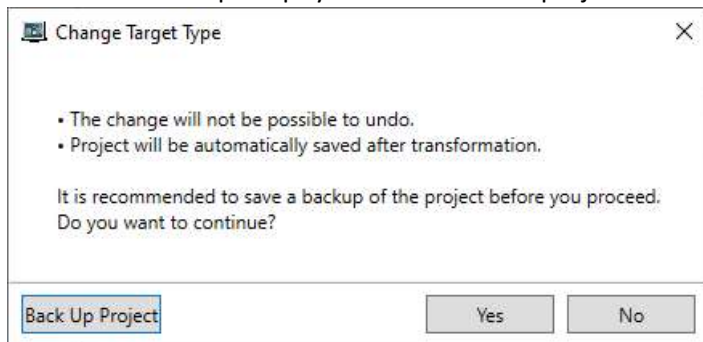
1. Click on the Project menu.
2. Click Settings in the Project menu toolbar.



3. Click “Display/Target”.
4. For the Target Type, select the panel model that you have.



5. Click ok.
6. The software will prompt you to convert the project.



This allows you to save a backup copy of the project prior to conversion.

7. Click yes. This will convert the project to the new panel model/size. If converting to a different size, the graphic objects may need to be resized or rearranged.

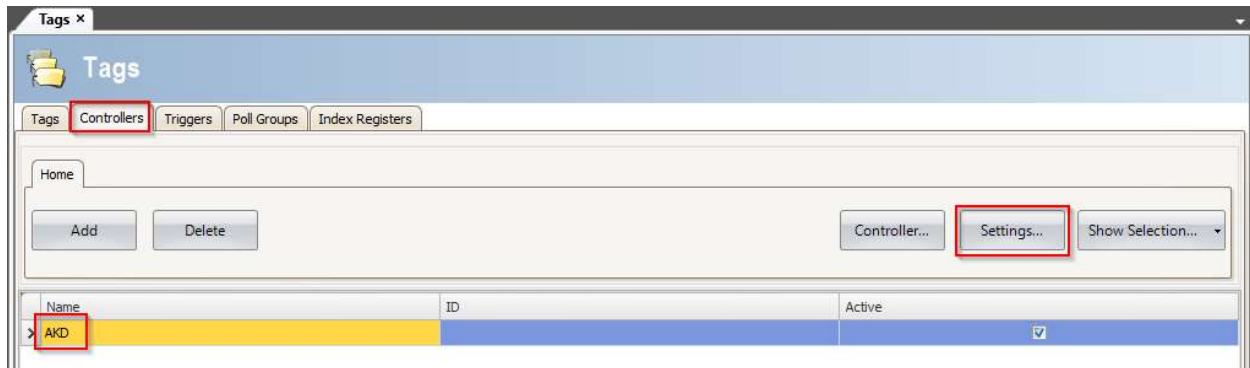
## Configure IP address of the drive

The HMI panel communicates with the drive over Modbus TCP. This requires setting the drive's IP address in the KVB project, so the panel can identify the drive.

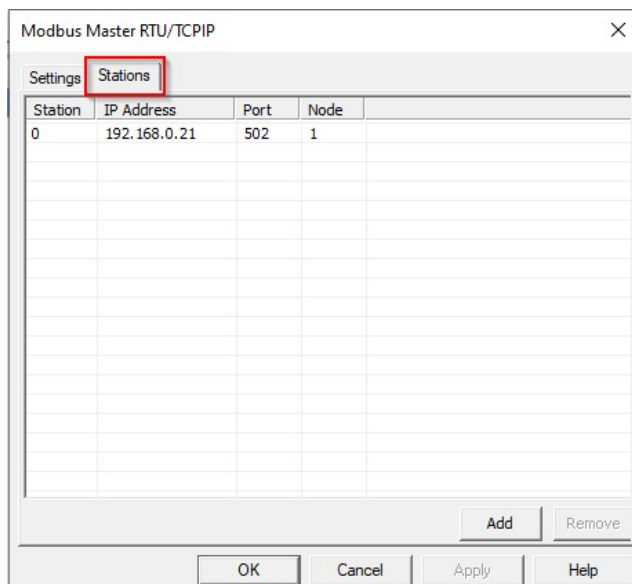
1. Click on Tags to open the Tag window.



2. Click on the Controllers tab, select your controller (your servo drive), and click the Settings button.



3. Click on the Stations tab.

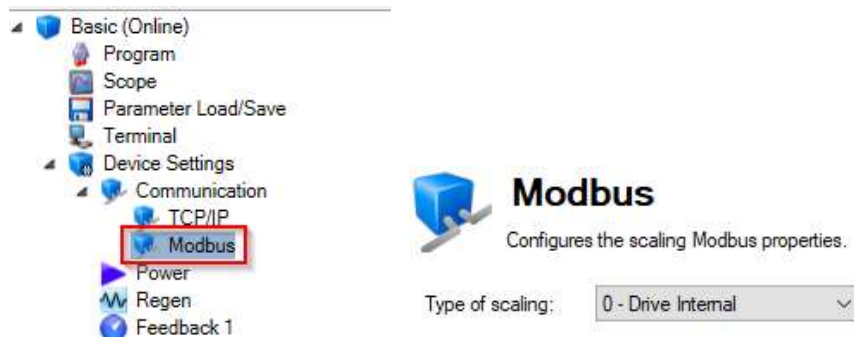


4. Type in the IP address of your AKD drive. This is how the HMI panel identifies and communicates with the drive.
5. Other settings: Station=0, Port=502, Node=1.
6. Click ok.

If the drive uses DHCP to assign an IP address, the server could reassign a new IP address to the drive causing the HMI to no longer be able to communicate with it. For that reason, it is recommended to use a static IP address.

### Configure Modbus units

The scaling for position parameters sent over Modbus TCP to the AKD drive is defined by the parameter MODBUS.SCALING. Set it to "0 - Drive Internal" for the position values to be scaled by the Units configuration in Workbench.



## Drive Setup

In Workbench, configure the drive for operation, including motor, feedback, power, tuning, etc.

Specific setting related to the KVB project:

- Service Position mode
- Units = 3-Custom (mechanics dependent) for Position, Velocity, and Acceleration. Configure the number of units per number of motor revs based on the mechanical system.

Position Unit: 3 - Custom (mechanics dependent) ▾

Velocity Unit: 3 - Custom/s (mechanics dependent) ▾

Acceleration Unit: 3 - Custom/s<sup>2</sup> (mechanics dependent) ▾

Modbus Unit: Goto Modbus

Custom

Label:

10 mm = 1 rev.

- Motion Tasks 1 – 6 (not task 0)
- Homing mode and necessary homing settings