

Specialised Settings for Beckhoff Drives

There are a number of specialised settings that need to take place on the Beckhoff setup for a new machine.

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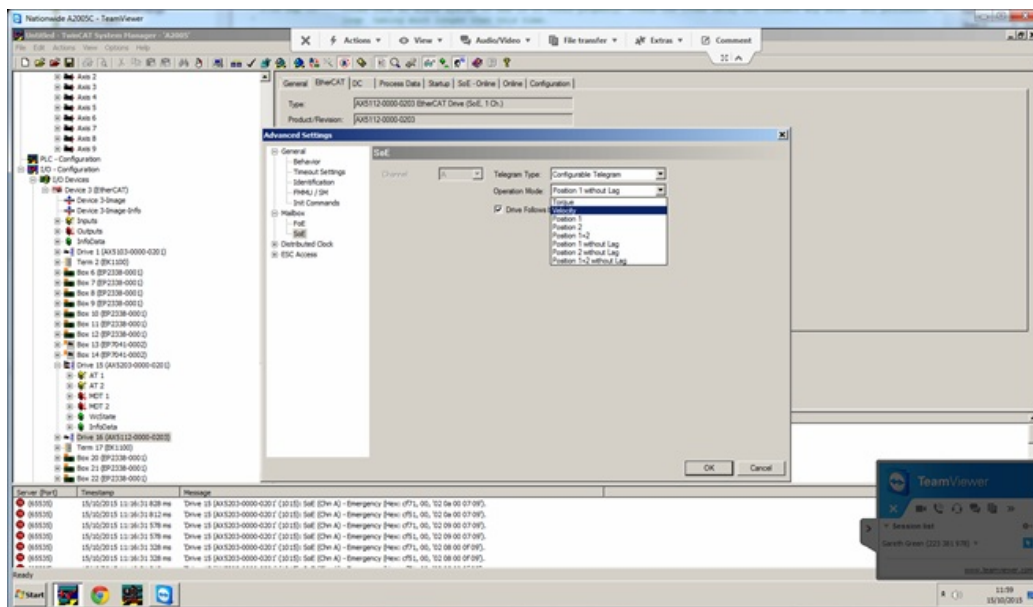
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Velocity Control

! ...This setting is for AX5000 Drives only

Change to velocity mode

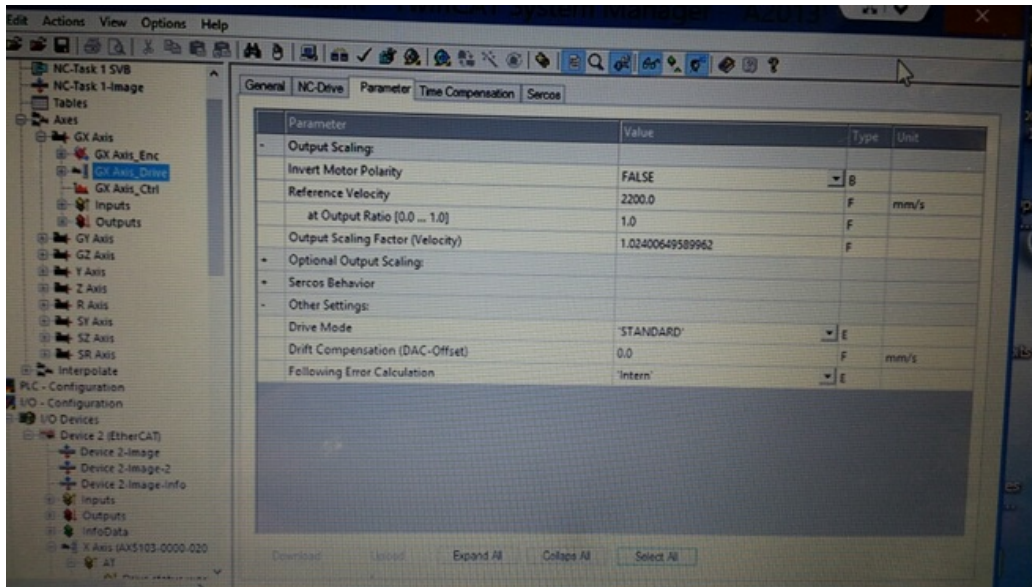
IODevices->Drive->EtherCAT->Advanced->MailBox->SoE->Operation Mode = Velocity



Following Error to Internal

! ...This setting is for AX5000 Drives only

From Axes, select the axis, then the "Axis_Drive" bar. Click on Parameter tab, Following Error Calculation is under "Other Settings" Set to 'Intern'



Integral Loop Time

This parameter gives a close following error calculation and improves the shape of slots by avoiding overrun on the axes

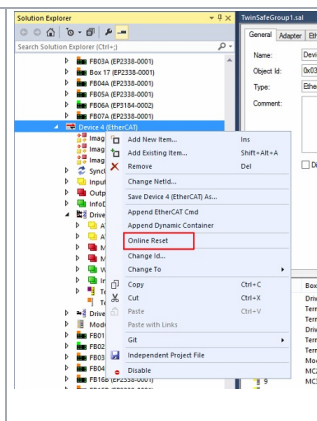
Ax5000 Drives



Step	Description	Picture
1	In the Drive Manager for the drive, Go to the Startup tab	
2	Find S-0-0101 for Channel A The default value is 8.0, we need to change it to 0.8 <div style="border: 1px solid blue; padding: 5px; display: inline-block;"> i ...If you cannot find an entry you will need to add a new entry </div>	
3	Click Edit button(or click add if this is a new Entry)	
4	Find the value for S-0-0101 in the box and click on it	
5	Change the Data (Hexbin) value to 08 00 and click OK	
6	both channels A and B if they are dual drives	

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Once all drives have been updated, reset the device to fix the settings
Right click on the device containing the settings and Select Online Reset



i ...This process changes the "Startup" parameters for the system, so that any drive plugged in to this axis position in future will automatically take the same parameters

Ax8000 Drives

See https://stuga.dokit.app/wiki/TB0442_Removing_Slot_Overrun_on_Beckhoff_AX8000_Drives

