

OPERATOR INTERFACE PRODUCTS APPLICATION NOTE AN# 1093

Subject: DesignStudio Date: 11/30/1999 Name: Kenneth L. Jones Description: I/O communications using the Write Trigger.

This application note is intended to assist the developer of DesignStudio applications in optimization of I/O communications. Writing continuously to the I/O will affect the performance of your application and using a Write trigger will minimize the communications.

Following this approach will enable a Write Trigger for the Driver sheet associated with the communications to set or the reset of the output coil.

Procedures:

Select the Comm. tab and insert the Modbus driver.



Page: 2 of 4 Right click on the Modb	OPERATC APPLICA rus and select Settin	OR INTERFA FION NOTE gs. Configure the com	CE PROD AN# 1093	DUCTS 3 ngs as follows:
Image: Model COM: Baud Rate: Data Bits: Stop Bits: Parity: Station: Signed Value O Long 2: O	Communication Para COM1 9600 8 1 Even Even e:	OK Cancel Advanced Protocol(ASCII or RTU): [RTU] Custom Command (ERO:**	×):	
Right click on Modbus a Sheet1. Description: Set Read Trigger: Write Trigger: Station:	Enable Read when Id Enable Write on Tag C Header: [[X:0]	nfigure the form as bel Incre e: Read Completed: hange: Write Completed:	ow. Close and the same read priority Read Status:	en save as
Tag 1 Jog_Set 2 3 4 5 6	Name 1	Address	Div	Add



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Insert another sheet and configure it to match this sheet. Close and save as Sheet2.

Reset	t			🗖 Incre	ease read priority	
Read Trigger: Write Trigger: ResetWriteTrigger		Enable Read when Idle: Read Completed:		Read Status: Write Status:		
		Enable Write on Tag Change: Write Completed:				
Station	n:	Header: 0X:0			Min:	
	Tagi	Name		Address	Div	Add
1	Tag t JogRst	Vame	1	Address	Div	Add
1 2	Tag t JogRst	Vame	1	Address	Div	Add
1 2 3	Tag t JogRst	Name	1	Address	Div	Add
1 2 3 4	Tag t JogRst	Name	1	Address	Div	Add
1 2 3 4 5	Tag t JogRst	Name	1 	Address	Div	Add

Select the Graphics tab and right click Screen and Insert a screen. Click on the Button object and place it on the graphic work area. Configure the Text to read Jog. Click on the Command object and configure the On Down actions as follows:

Jog
Replace Command
Tag Expression More >> On Up
ResetWriteTrigg NOT ResetWriteTrigger
Key Shift Disable Security



Close the screen and save it as Jog.scr. Connect COM1 to your PLC. Set your Execution environment to Local. Run your application. Set up a Database Spy Window for the value of Set_Jog and JogRst tags. Press F1 or click on to the Jog button and you will see the states change. Using a light as output on you PLC and you will see it respond to the On Down and On Up settings of the Jog button.

