

Product Note

## Using Sigma-5 Outputs with MP2\*\*\*iec controllers

## Applicable Product: SGDV-\*\*\*\*1\*\*

All Sigma-5 servopacks with MECHATROLINK communication interface

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## **Product Note Overview**

This document describes how to control outputs on the Sigma-5 servopack from an application program inside the MP2\*\*\*iec controller.

## Description

Beginning with firmware version 10, the Sigma-5 servopack will allow local outputs to be controlled either by local predefined functions OR through a remote MECHATROLINK command. However, If any outputs are controlled by local predefined functions then ALL output control through MECHATROLINK will be disabled.

In order to control Sigma-5 servopack outputs from an iec-based controller, servopack parameters Pn50E, Pn50F, and Pn510 must all be set to zero. The factory default for these parameters is 0000, 0100, and 0000, respectively; therefore, to control outputs on a brand new servopack, the user must set Pn50F to 0000.

Warning: Setting Pn50F to 0000 disables the holding brake output. Make sure you are not using the holding brake before changing the value of Pn50F!

To change Pn50F through Motionworks IEC software:

Start the software and open the current project.

Click on the configuration tool icon to start the configuration tool.

Go online with the controller and navigate to the desired servopack in the tree.

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Module Configuration	Limits Con	nfiguration   1/0   Tunin	g   Test Move   Function   Absolute Er	fline Connect	ake Du			228
CP/IP Settings → EtherNet/IP → Modbus/TCP → LIO-01 → Counter	Pn50 Pn50 Pn50	07 Brake Referenc	e - Servo OFF Delay Time e Output Speed Level e Reference during Motor Operation sut	0	Units ms RPM ms	Min 0 100	Max 500 10000 1000	

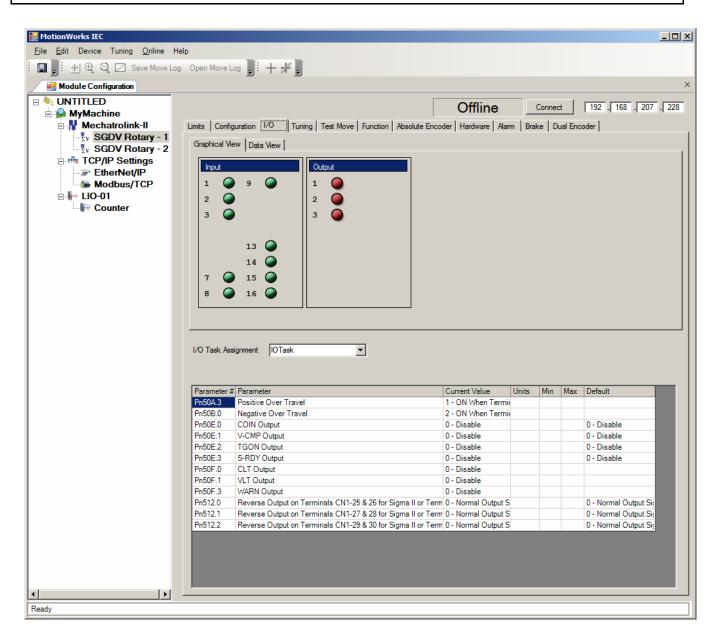
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Click on the Brake tab and locate the parameter Pn50F.2. Change the current value to "0 – Disable"  $\,$ 

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Module Configuration  Module Configuration  MyMachine  MyMachine  MyMachatrolink-II  My SGDV Rotary - 1	Limits Configuration	n   1/0   Tuning   Test Move   Funct	Offline on Absolute Encoder H	Connect Hardware Alarm B			_ 207 Jer	× _228
SGDV Rotary - 2	Parameter # Pn506 Pn507 Pn508 Pn50F.2	Parameters Brake Reference - Servo OFF Delay Brake Reference Output Speed Level Timing for Brake Reference during M BK (brake) Output	100		ms RPM	Min 0 0 100	Max [ 500 0 10000 1 1000 5	0(
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Ready								

If you are not sure if the servopack had default parameters, click on the I/O tab and verify that parameters Pn50E, 0 through 3, and Pn50F, 0, 1, and 3 are set to zero. If not, then set these parameters to zero.

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Save the project.

Physically cycle logic power on both the controller and the servopack. If you do not cycle power on the servopack the parameters will not take effect.

Use the variables created in the Global Variables table to control the Sigma-5 outputs.