



## Software Options Overview

### *Firmware Options for the TSD and TSP drive series*

Enhance the standard firmware of the TSD and TSP drives with software options.

## Table of Contents

|   |                               |   |   |                                     |   |
|---|-------------------------------|---|---|-------------------------------------|---|
| 1 | GY – MIMO Gantry Control..... | 1 | 3 | XC – Eccentricity Compensation..... | 2 |
| 2 | PU – Pulsing Unit.....        | 2 |   | Revision History.....               | 3 |

## 1 GY – MIMO Gantry Control

Enables 100kHz MIMO gantry control with decoupled linear position and yaw displacement loops. Stiff and soft gantry setups are supported. More information is available in the Application Note AN139. This option is exclusively available for the TSD series.

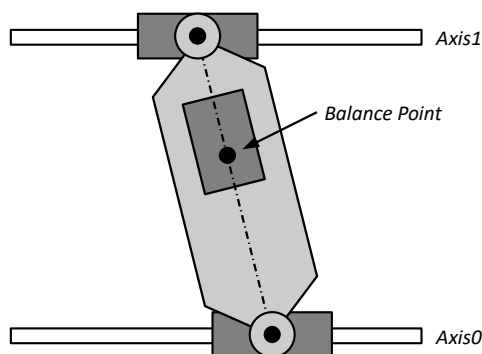


Figure 1: MIMO Gantry

## 2 PU – Pulsing Unit

Enables high frequency, position based, pulse generation functionality for Option Module Encoders EN and EH. More information is available in the Application Note AN152.

This option is available for the TSP and the TSD series.

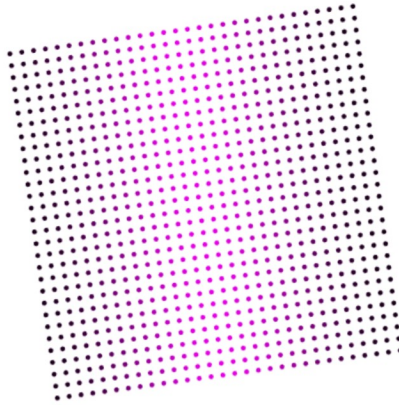


Figure 2: Pulsing Unit: pulsing pattern

## 3 XC – Eccentricity Compensation

Enables eccentricity compensation for rotational axes with 2 sensors on opposite sides of an encoder disc. The activated option discloses the following Register to activate the compensation independently on *Axis0* and/or *Axis1*.

`Axes[].Parameters.PositionController.EccentricityCompensation`

This option is available for the TSP and the TSD series.

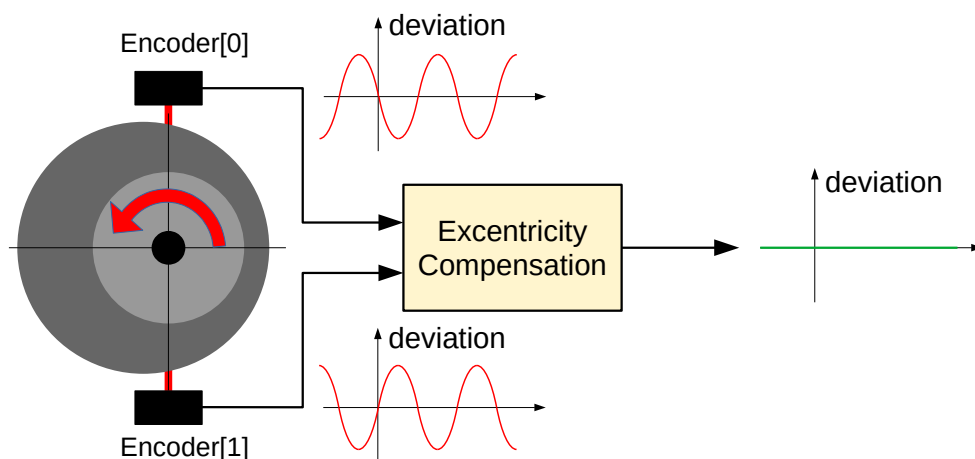


Figure 3: Eccentricity Compensation

## Revision History

| Version | Date       | Editor | Comment          |
|---------|------------|--------|------------------|
| 001     | 2022-03-25 | sm     | First release    |
| 002     | 2023-04-27 | sm     | Add Pulsing Unit |
|         |            |        |                  |

## Triamec 中国-销售/技术服务中心

TEL: (0) 13776269231 E mail: sales@tyt-motion.com URL: www.triamec.com.cn

Copyright © 2023  
Triamec Motion AG  
All rights reserved.

Triamec Motion AG  
Lindenstrasse 16  
6340 Baar / Switzerland

Phone +41 41 747 4040  
Email [info@triamec.com](mailto:info@triamec.com)  
Web [www.triamec.com](http://www.triamec.com)

## Disclaimer

This document is delivered subject to the following conditions and restrictions:

- This document contains proprietary information belonging to Triamec Motion AG. Such information is supplied solely for the purpose of assisting users of Triamec products.
- The text and graphics included in this manual are for the purpose of illustration and reference only. The specifications on which they are based are subject to change without notice.
- Information in this document is subject to change without notice.