SERVO**STAR**® S600
Registration Mark Function

Functionality begins with firmware 3.00.

Description

With the registration function, it is possible to latch the actual feedback position by an input signal using inputs 1 and 2. Four registers are reachable using inputs 1 and 2. A different value can be stored on the rising and falling edges. Additionally, the SERVO**STAR**® S600 Motion Task function is used to execute an index to the registration motion in which the motor moves a precise distance after the registration mark is detected.

Motion Task Set up

Two Motion Tasks are required to set up and execute an index to Registration move:

First Motion Task
Create a motion task to perform an incremental index longer than the distance required to reach the registration mark. Type:
```
Relative to Command
    Or
Relative to Actual
```

Second Motion Task
Create a motion task with X_CMD set to the distance desired to move past the registration mark. Type:
```
Relative to Latch Position Positive
    Or
Relative to Latch Position Negative
```

Registration Mark Set-up

Use digital input 1 or 2. Select input mode 26. In "value X," enter the number of the motion task defining the distance past the registration mark to move.

Output Indicator Set-up

An output can be used to indicate when the registration mark has been reach. To set the output up, go to the Terminal screen and set:

```
O2MODE 37
O2TRIG 1048576
```

> The response "position latched" by positive edge is mapped to output2. To reset this output, read LATCH32.

```
O1MODE 39
O1TRIG 8388608
```

> The response "negative latched" by the negative edge is mapped to output1. To reset this output, read LATCH32N.

Parameters for Latch Position

The following SERVO**STAR** S600 parameters store the value of the latched position.

LATCH16
Reads out the position within one motor revolution latched by the positive edge.

LATCH16N
Reads out the position within one motor revolution latched by the negative edge.

LATCH32
Reads out the complete position latched by the positive edge.

LATCH32N
Reads out the complete position latched by the negative edge.

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