

Application Note TN20-33

Effect of REPDIST and Software Limits when using Axis Type 4 (Stepper + Encoder Verification) as a separate Encoder Input and Stepper Drive Output. System Software Version 1.48.

1. REPDIST (REP_OPTION = 0)

ACTION		MPOS	DPOS
Encoder Input exceeds REPDIST		$MPOS = MPOS - 2 \times REPDIST$	$DPOS = DPOS - 2 \times REPDIST$
Stepper Output exceeds REPDIST		No Change	No Change

2. FSLIMIT / RSLIMIT

ACTION	AXIS-STATU S	MPOS	DPOS
Encoder Input exceeds FSLIMIT	512	Counts + & -	Moves + & -
Stepper Output exceeds FSLIMIT	0	Counts + & -	Moves - only
Encoder Input exceeds RSLIMIT	1024	Counts + & -	Moves + & -
Stepper Output exceeds RSLIMIT	0	Counts + & -	Moves + only

3. DEFPOS and OFFPOS

ACTION	MPOS	DPOS
DEFPOS(0)	$MPOS = MPOS - DPOS$	$DPOS = 0$
DEFPOS(x)	$MPOS = MPOS + (x - DPOS)$	$DPOS = x$
OFFPOS = n	$MPOS = MPOS + n$	$DPOS = DPOS + n$

4. DATUM(0)

ACTION	MPOS	DPOS
DATUM(0)	No Change	$DPOS = MPOS$