Digital DRIVE for Brushless motors SMD Series

Stepper mode Quick Start guide

Read manual before installing and follow all instructions with this icon:



SMD-Stepper Quick Start Guide-1935-EN

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Stepper Quick Start Guide

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R2109	AG (SERAD)	03/03/2021	Update screenshot
R1935	AG (SERAD)	29/08/2019	Correction
R1927	AG (SERAD)	04/07/2019	First edition
Revision	Edited by	Date	Modification

Auxiliary configuration

Start Incremental encoder configuration window:

etti P	roject	Settings	Communication	Tools	Motio	on control	Drive Basic Opt	tions Help								
Import	Mode	No mode	* Regulation		Speed	Position	Digital inputz	Security	Motor	Serial feedback	Resolver	Birr	EnDAT 2.2	JUL JUL	Modbus	
from library			Regulation	loop	loop	loop	/ outputs	Security	MOLOI	(Tamagawa type)	feedback	feedback	feedback	encoder	RS232	CANopen
Settings			Regulation	i.			Digital Inputs / Outp	outs security	Motor		F	eedback			C	ommunication

I Incremental	encoder	×
Encoder type	Enabled: Number of points per turn: Related feedback: Offset: Reversal of meaning:	▼ 4 000 ☆ None ▼ 0.000 ☆

- Encoder type: Pulse/Direction
- Number of point per turn: indicate the number of pulses given for a turn. For example, if a PLC send 4000 pulses for one turn, Number of points per turn = 4000.
- Related feedback, and offset are not used for stepper mode.
- Reverse of meaning: tick if you want reverse the sense.

Gear box configuration

Start the GearBox configuration window:

🧼 🔡	🔄 Drive1	I		• • •	e i,	il 🎩 G 🔻	• 🔟
1210	Project	t Setting	gs Commur	ication	Tools	Motion control	Drive Basic
Setup	Scaling Mot	Limits H	ome Master / slave	Gearbox	Cames Syn	* chronization	Edit the cam
Ge	arbox	(
Slave	distance : er distance :	1.00	0 0				
Acce	vertable	0.00	•				

- Slave distance / Master distance: Allow to configure the ratio between the master (Auxiliary encoder) and the slave (Servo drive motor), this indicate which distance will be done by the slave for a determined distance of the master.
- Acceleration: indicate the master distance before apply the full configured ratio. During the Acceleration distance, the ratio grow up from 0 to the configured ratio
- Revertable indicate that the gearbox work in both direction.

Stand alone mode

Now we must configure the drive to automatically after the startup, start the gearbox mode. The Master axis and slave axis will be automatically linked together on the startup.

Chose the gearbox mode here:



Enable the drive

The drive must be enabled. There are two ways:

- 1. Using Drive Studio software:
 - a. Pass Online



b. Enable the Drive on the right vertical bar



2. Using the Input Enable:

🥔 📳 🔤 Driv	e1		= 0 i , i	, 🎩 🙃 荐	- 20		
Proje	ct Settings	Communication	Tools N	lotion control	Drive Basic	Options	Help
Import from library Settings	No mode	* Regulation Regulatio	Current Spe loop loo	eed Position op loop	Digital in / outpu Digital Inputs /	outs ts Outputs s	Security security
Digital	Inputs	/ Outpu	ts				
C Insuits							
	Functions		Invert	Filtering			
11 :	Enable / Auto	tion			Slow 0.001	▲ ▼ ms	
12 :	None	•			Quick	_	
13 :	None				0.001	ms ms	
14 :	None	<u> </u>					
15 :	None	<u> </u>					
16 :	Induce						
∃ Outputs							
	Functions		Invert				
Q1 :	Drive ready	-					
Q2 :	None	•					

The input 1 must be configured with the "Special function" Enable.

Set value to "Validation". Then now, if the input E1 goes to logical level '1', the drive goes to Enable and the motor is now linked to the auxiliary pulses.