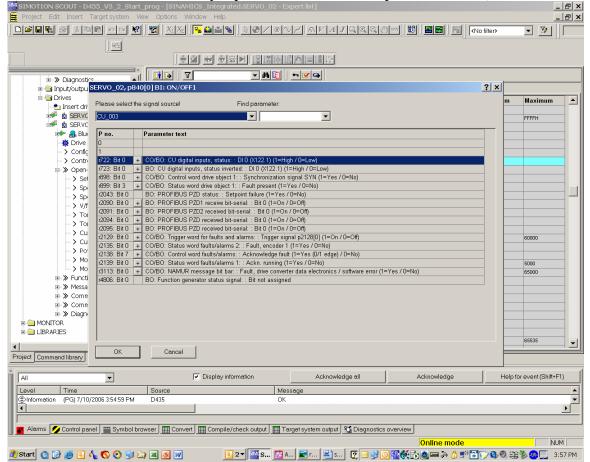
The following parameter changes will allow you to take control of the 2 axis from binary input in (on the switchbox) and enter a fixed speed setpoint in axis 1 (P2900) which both axis will then follow .

From the standard setting for a simotion D demo rig $\,$, change the following parameters in each axis : -

1st Axis

- 1) P922 = Free telegram with Bico
- 2) P840 = CU controller Binary input 1 (axis will now stop start from this)



- 3) P844 = 1
- 4) P848 = 1
- 5) P852 = 1
- 6) P854 = 1
- 7) P856 = 1
- 8) P1160 = P2900 from the 1st axis (default name is Servo2) This will allow us to change the speed setpoint to both axis from one fixed parameter (P2900) in Sinamics axis 1

SIMOTION SCOUT - D435_V3_2_s		- [SINAMICS_Integrated.SERVO_02 - Expert list] bions Window Help	X X
	N 1		• 3
915			
B → ≫ Diagnostics	ERVO_02,	o1160[0] CI: Speed controller speed setpoint 2	? ×
	Please sele	t the signal source! Find parameter:	
			imum 🔺
nsert drive	SERVO_02		imum 🔺
🕮 🏟 SERVO 02	P no.	Parameter text	
🕬 🏟 SERVO 03	r2060[0]	+ CO: PROFIBUS PZD receive double word, PZD 1 + 2	
🕪 🔐 Blue(D435)	r2080[0]	+ CO: PROFIBUS P2D receive double word, P2D 1 + 2 + CO: PROFIBUS send status word. Status word 1	
- 🔆 Drive navigator	12000[0]	CO/BO: Trigger word for faults and alarms	
> Configuration	12123	CO: Actual fault code	
-> Control logic	12131	CO: Actual alarm code	
B → ≫ Open-loop/closed-	r2135	CO/BO: Status word faults/alarms 2	9
Setpoint additic	r2138	CO/BO: Control word faults/alarms	
> Speed setpoint	r2139	CO/BO: Status word faults/alarms 1	
> Speed controle	r2169	CO: Speed actual value smoothed signals	
-> V/f control	r2197	CO/BO: Status word monitoring 1	
> Torque setpoin	r2198	CO/BO: Status word monitoring 2	
> Torque limiting	r2199	CO/BO: Status word monitoring 3	
-> Current setpoir	p2900	CO: Fixed value 1 [%]	
-> Current contro	p2901	CO: Fixed value 2 [%]	
-> Power unit	p2930	CO: Fixed value M [Nm]	
-> Motor	r3113	CO/BO: NAMUR message bit bar	
> Motor encoder	r3840	CO/BO: Friction characteristic, status word	
E-≫ Functions	r3841	CO: Friction characteristic outr3113, CO/BO: NAMUR message bit bar	
B ≫ Messages and mor	r3875	CO/BO: Long stator status word	6
	p3878	CO: Long stator commutation angle 1	
	p3879	CO: Long stator commutation angle 2	
	r8850[0]	+ CO: COMM BOARD PZD receive word, PZD 1	
	r8860[0]	+ CO: COMM BOARD PZD receive double word, PZD 1 + 2	
	114775	1 111/MLP SLetatile (control limit)	
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Level Time	Sou	rce Message	
Information (PG) 7/10/2006 3:54:59	PM D43	5 OK	▼
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P2900 = Your required speed setpoint in %.

Axis 2

9) P922 = Free telegram with Bico
10) P840 = CU controller Binary input 1 (axis will now stop start from this)

	arget system	_prog - [SINAMICS_Integrated.SERVO_02 - Expert list] lew - Optons Window Hep M XIX IS @ Mark DOCONSAN TATAQQCIDM 101	
	lette		
🐵 📹 Input/outpu 😒	ERVO_02, p8	0[0] BI: ON/OFF1	? ×
🖻 📹 Drives 📩 Insert dri	Please select t	e signal sourcel Find parameter:	m Maximum 🔺
😁 🏙 SERVC	CU_003		FFFFH
	P no.		
🕮 🚓 Blux	P no.	Parameter text	
> Config	1		
> Contri	r722: Bit 0	CO/BO: CU digital inputs, status: ; DI 0 (X122.1) (1=High / DeLow)	
B-≫ Open-		BO: CU digital inputs, status inverted: : DI0 (X122.1) (1=High / 0=Low) CO/BO: Control word drive object 1: : Synchronization signal SYN (1=Yes / 0=No)	
> Spi	r899: Bit 3		
> SD	r2043: Bit 0	BO: PROFIBUS PZD status: : Setpoint failure (1=Yes / D=No)	
		BO: PROFIBUS PZD1 receive bit-serial: : Bit 0 (1=On / 0=Off)	
> To	r2091: Bit 0		
> Toi	r2094: Bit 0		
> Cu	r2095: Bit 0 r2129: Bit 0	BO: PROFIBUS PZD received bit-serial: Bit 0 (1=0n / 0=0ff) CO/BO: Trigger word for faults and alarms: Trigger signal p2128[0] (1=0n / 0=0ff)	60000
> Cu	r2135: Bit 0		60000
> Por		CO/BO: Control word faults/alarms: : Acknowledge fault (1=Yes (0/1 edge) / 0=No)	
> Mo		CO/BO: Status word faults/alarms 1: : Ackn. running (1=Yes / 0=No)	5000
> Mo		CO/BO: NAMUR message bit bar: : Fault, drive converter data electronics / software error (1=Yes / 0=No)	65000
B-≫ Functi	r4806: Bit 0	BO: Function generator status signal: : Bit not assigned	
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- 11) P844 = 1
- 12) P848 = 1
- 13) P852 =1
- 14) P854 = 1
- 15) P856 = 1
- 16) P1160 = Servo2, r62. This will allow the second axis to follow the speedsetpoint of the first axis.

		rt_prog - [SINAMICS_Integrated.SERVO_03 - Expert list] View Options Window Help				- 8 ×
		edited to the difference of the test of the test of the test of the test of the edited in test of the test of test of the test of test				
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	19Ez					
⊞-≫ Diagnosti	2		- 1			
	ERVO_03, p	160[0] CI: Speed controller speed setpoint 2	? ×	의		
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*2₁ Insert dri ⊮₩ ⋔ SERVC						
	SERVO_02					
🕪 🔒 Blu	P no.	Parameter text	-		210000 210000	
Drive	0				210000	-
> Confic	100%				0	-
> Contr	r35	CO: Motor temperature				-
⊟-≫ Open-	r37[0]	+ CO: Power module temperatures, Maximum inverter			999999	-
-> Set	r46	CO/BO: Missing drive enable signals			600	
-> SD	r50	CO/BO: Command data set CDS effective				
-> Sp	r51	CO/BO: Drive data set DDS effective				
-> V/f	r56	CO/BO: Closed-loop control status word 1				
> To	r60	CO: Speed setpoint before the setpoint filter				
> To	r61	CO: Speed actual value motor encoder				
> cu	162	CO: Speed setpoint after the filter				
> Cu	r63 r64	CO: Actual speed, smoothed				
> Por	r64 r66	CO: Speed controller system deviation			FFFFH	
	168	CO: Drive output frequency CO: Absolute current actual value				
> Mo	170	CO: Actual DC link voltage				
	172	CO: Drive, output voltage	_		1E+006	_
	174	CO: Modulat depth			127000	_
⊞-≫ Comn	177	CO: Current setpoint, torque-generating			10000	-
⊞-≫ Comn	178[0]	+ CO: Current actual value, torque-gen/r74, CO: Modulat depth			10000	
	179[0]	+ CO: Torque setpoint total, Umsmoothed			210000	
III 🧰 MONITOR	180	CO: Torque actual value			300	
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