

3rd Party EtherCAT Slave Online Setup Quick Start Guide

How to setup a 3rd Party Slave (Wago I/O Coupler 750-354) Online to the Sysmac NJ



Document: QSG 3rd Party EtherCAT Slave Wago 750-354 Online Setup Page 1 of 10





1. Create a Project in Sysmac Studio

2. Edit EtherCAT Configuration



Document: QSG 3rd Party EtherCAT Slave Wago 750-354 Online Setup Page 2 of 10



3. Display ESI Library



4. Check to see if 3rd Party Slave Wago ESI is installed



Document: QSG 3rd Party EtherCAT Slave Wago 750-354 Online Setup Page 3 of 10



5. Add ESI file to UserEsiFiles folder, Restart Sysmac Studio

	🧼 ≪ Program Files (x86) → OMRON → Sysmac Studio → IODeviceProfiles → EsiFiles → UserEsiFiles					
	✓ Include in library ▼ Share with ▼	Burn New folde	r			
5a. – After you have added	Name	Date modified	Туре	Size		
the Wago ESI file to the folder	AKD EtherCAT Device Description (XML)	5/14/2012 9:12 PM	XML Document	342 KB		
shown	ESI_IAI_ECT_V_1_04_Rev_2_SP_ForNJ.xml	4/5/2012 1:24 AM	XML Document	256 KB		
5b Save your Sysmac	🔮 Festo CPX-FB38-USINT-Omron.xml	11/2/2011 11:22 AM	XML Document	89 KB		
Studio Project,	illischer NT 100-ECS-XX V2.2.xml	9/29/2011 3:31 AM	XML Document	79 KB		
5c Close Sysmac Studio	LinMot_ECAT_Servos_V1_5t_Omron 2012	7/31/2012 2:44 AM	XML Document	59 KB		
5d. – Restart Sysmac Studio	SMC EX260-SECx_V12.xml	2/1/2012 10:02 AM	XML Document	26 KB		
and open the previous project	SMC EX600-SECx_V11.xml	2/27/2012 9:45 AM	XML Document	444 KB		
	TURCK SECE_release1.xml	8/3/2012 1:48 AM	XML Document	512 KB		
	WAGO_750_354.xml	8/25/2011 9:07 AM	XML Document	904 KB		
	📄 Yaskawa SGDV-E1_CoE rev3.05.xml	12/2/2011 12:46 PM	XML Document	472 KB		
	🔮 Yaskawa SGDV-E5_CoE rev3.05.xml	12/2/2011 12:46 PM	XML Document	470 KB		

6. Go Online



Document: QSG 3rd Party EtherCAT Slave Wago 750-354 Online Setup Page 4 of 10





7. Write Slave Node Address

8. Enter Slave device address 1, Write



Document: QSG 3rd Party EtherCAT Slave Wago 750-354 Online Setup Page 5 of 10



9. Select Compare and Merge



10. Apply actual network configuration

Compare and Merge with Actual Network C	onfiguration					
Node Address Network configuration on Sysm	Node address Actu	al network configuration	. Comparison result	Lower Configuration		
Master Master		Master	Matched			
	1	750-354 Rev:0x000000	2 Added			
		_				
10a. – Sele	ct Apply a	nd then Close				
▲ Apply a	ctual network config	uration				
Some slaves such as Power Supply Units are not included in the actual network configuration.						
		Close				

Document: QSG 3rd Party EtherCAT Slave Wago 750-354 Online Setup Page 6 of 10





11. Edit Module Configuration to see the I/O

12. View the I/O, 4 Digital In, 4 Digital Out, Go Offline

WAGO 750-354 to NJ - new_Controller_0 - Sysn	nac Studio	
X Image: Controller_O Image: Controller_O WAGO 750-354 to NJ Image: Controller_O Image: Controller_O Image: Controller_O Image: Controler_O <tr< th=""><th>Configurations and Setup EtherCAT × Node1 : 750-354 (E001) Posit Slot Module Node1 : 750-354 (E001) 0 Terminals 750-4xx / 750-14xx (4b in) (1 Terminals 2 Terminals 4 Terminals 12a. – View I/O: 4In, 4Out The I/O shown should match with the actual bardwaro</th><th>× + Contraction of the second second</th></tr<>	Configurations and Setup EtherCAT × Node1 : 750-354 (E001) Posit Slot Module Node1 : 750-354 (E001) 0 Terminals 750-4xx / 750-14xx (4b in) (1 Terminals 2 Terminals 4 Terminals 12a. – View I/O: 4In, 4Out The I/O shown should match with the actual bardwaro	× + Contraction of the second
🕄 Filter 🗷	13 Terminals 14 Terminals 15 Terminals 16 Terminals 17 Terminals 18 Terminals 19 Terminals 19 Terminals	

Document: QSG 3rd Party EtherCAT Slave Wago 750-354 Online Setup Page 7 of 10



13. Go to I/O Map, Create Device Variables



14. View Device Variables, Rebuild Controller (Compile)



Document: QSG 3rd Party EtherCAT Slave Wago 750-354 Online Setup Page 8 of 10





15. Go Online and then Synchronize

16. Transfer To Controller

chronizat	tion			Connad		u dettudi	FINER	
	Computer: Data Name	Computer:	Update D	aController:	Update Da	Controller: Data Name	Compare	
	▼NJ501	7/19/2013	11:38:29 /	A 7/18/2013	1:34:22 PN	▼NJ501		
	▼ EtherCAT	7/19/2013	11:38:29 /	A 7/18/2013	1:34:22 PN	▼ EtherCAT		
	L -	-		7/18/2013	1:34:21 PN	L NexEcatMdpSlave0		
	L Node1 : 750-354(E00	7/19/2013	11:38:28 /	4 -		L -		
	CPU/Expansion Racks	7/19/2013	11:38:29 /	A 7/18/2013	1:34:22 PN	▼ CPU/Expansion Racks		
	▼ CPU Rack	7/18/2013	12:35:26	P 7/18/2013	12:35:26 P	▼ CPU Rack		
	1.11.25	7/10/2012	12-25-26	7/18/2013	12:35:26 P	∟ Units		
	L Units	1/10/2013	12.22.201	7710,2015	121331201			
	⊂ Units ▼ Controller Setup	7/18/2013	12:35:26	7/18/2013	12:35:26 P	▼ Controller Setun		
16a	Controller Setup Transfer To Controller Setup	1/18/2013 7/18/2013	12:35:26 I 12:35:26 I ne si bute ransfer to	ide 16b Controller).	12:35:26 P	Controller Setup e after Transfer	comple	e te s chang
Do not Do not - CJ-ser - Slave	Units Controller Setur Transfer To Con Transfer the program source transie, the following. (All in ies Special Unit parameters Terminal Unit one tion set	T/18/2013 T/18/2013 Troller e (Valid for T tems are not and EtherC4 tings and N	12:35:26 J he si bute ransfer to transfer to transfer b (Unit app	Controller). ed.) ackup paran plication data	All date will neters.	e after Transfer	comple	e te s chang

Document: QSG 3rd Party EtherCAT Slave Wago 750-354 Online Setup Page 9 of 10



17. Set to Run, Turn on Output Channel 2



This completes the Quick Start for the Offline Setup of the NX I/O with the EtherCAT Coupler.

Please visit our YouTube Channel for Omron Quick Tip and other videos: https://www.youtube.com/user/OmronAutomationTech

Document: QSG 3rd Party EtherCAT Slave Wago 750-354 Online Setup Page 10 of 10