

Release Notes for SigmaLogic™ Software Package

Release Date 10/31/2018

Yaskawa America, Inc.

LogicWorks Configuration Utility 2.2.0.5

1. New Features

Number	Summary	Release Notes
1180	SigmaWin+ v7 does not fully support Sigma-7Siec or SigmaLogic7 products	Full support for Sigma-7Siec, SigmaLogic7 Compact and SigmaLogic7 Modbus is now available starting in SigmaWin+ v7.23
2130	Update Default project archives to support embedded code v2.2.0	Internal archive files used during Return To Factory Settings have been updated to install Embedded Code v2.2.0.1. This embedded code version will be required for units with firmware v3.5.1 or higher. Due to a hardware change for a memory chip, firmware 3.5.1 or higher will be required beginning in October 2018.

2. Bug Fixes

None

3. Known Issues

Number	Summary	Release Notes	Workaround
591	LogicWorks Crashes when clicking flag reference text	Double clicking on the reference text in the Flag Reference Table will cause the Flag Reference Table to close immediately.	Single-click over the flag reference text to place the cursor in the text field or drag the mouse over the text to highlight it for change.
595	No project compare on Connection	The offline file contents are not automatically compared to the actual configuration when Connection is made to a SigmaLogic axis. This can result in a difference between what the user sees in the configuration utility screens and what is stored in the axis.	Establish a Best Practice procedure to manually compare the file name to the current configuration name or to always Receive the current configuration immediately after Connection to a SigmaLogic unit.
638	LogicWorks does not display the values for CN13 Analog I/O	Support for monitoring and controlling the CN13 Analog I/O points from the PLC was added in SigmaLogicEmbeddedCode v1.2.0 and SigmaLogic_AOI v1.2.0. However these values are not currently displayed on the LogicWorks Status and I/O monitoring pages.	Use PLC to monitor and control the CN-13 Analog I/O using Tags 'AxisRef'.I.AnalogInput and 'AxisRef'.O.AnalogOutput.
1150	LogicWorks Setup does not support user-defined installation locations.	For LogicWorks v2.0 and earlier, only the default installation location is supported during Setup. This issue will be addressed in a future version of LogicWorks.	Use the default installation location
1163	Saving project during File - Exit process will not add the project name to the Recent Projects List	There are many opportunities provided to save the LogicWorks project to a file on the PC. The last occurs during File->Exit process. If "Save Project" is chosen during the exit process, the project will be saved properly to the specified location, but the Recent Projects listing will not be updated.	Save the project first as a separate procedure before starting the Program Exit process.

1168	LogicWorks v2.0 cannot connect to SigmaLogic units with 3.0.0.173 firmware	LogicWorks v2.0 and above requires firmware version 3.3 or higher. There are several configuration files that have changed format between these firmware versions. Use the SigmaLogic web interface to update firmware. For more assistance, please discuss with your Yaskawa vendor.	None
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SigmaLogic Embedded Software v2.2.0.1

4. New Features

Number	Summary	Release Notes
1231	Request to allow Jog function to change direction on-the-fly	Previously, Jog parameters such as Accel, Decel and speed were allowed to be changed while running, however the jog direction was not allowed to change unless the user came to a stop first and re-executed the MAJ_Yaskawa AOI with a new direction setting. Starting in embedded software version 2.2, Jog direction is also allowed to be changed on-the-fly. Simply change the AOI input parameter for direction while holding the EN input true.
2131	Change Build Settings to support firmware v3.5.1	Build settings were changed to support firmware v3.5.1. Starting with Embedded Code v2.2.0, firmware v3.5.1 or higher must be installed in the product.

5. Bug Fixes

Number	Summary	Release Notes
1326	SigmaLogic Homing SFC does not sequence properly	In previous versions, Home Torque limit was only being set proper during the first homing attempt. Subsequent homing attempt would leave the homing torque set at maximum levels. This issue has been corrected starting in embedded Software v2.2.

6. Known Issues

Number	Summary	Release Notes	Workaround
600	HSI does not wait for move to be In Position	For all other moves, move complete status is sent to the PLC when the commanded profile is finished AND when the motor position is within the range specified by the LogicWorks configuration under Configure - Options - Position Completion Window. In v1.1.0, the High Speed Index moves do not wait to be in the position completion window. Move complete is set when the commanded profile is finished.	Add external delay for subsequent processes/actions that depend on the motor being settled into its final position.
650	Sequence Table execution resumes in certain cases where servo is disabled, then re-enabled	In SigmaLogic AOI v1.2.0, MSF_Yaskawa (Motion Servo OFF) is allowed to execute even though another AOI could be active, such as MSQR_Yaskawa (Motion Sequence Run). Disabling the axis during motion will cause an application fault which normally would abort the sequence. However, if the sequence was waiting for a flag either Before or After motion, then no fault would be generated and the sequence table would still be executing even though the servo would not be capable of motion.	The user should issue MAS_Yaskawa (Motion Axis Stop) prior to issuing MSF_Yaskawa (Motion Servo OFF) to properly stop an axis and abort sequence execution. Alternatively, the user could set the Cancel input on MSQR_Yaskawa. Canceling the sequence will also stop motion.
1184	Function Block Error ID 4422 shows up as "Unknown Error".	Application ErrorID 4422 is a new function block error code most relevant to SigmaLogic7 and Sigma-7Siec based products. ErrorID 4422 means "Position Offset Update Failed" and occurs when not enough time is given to the function for setting motor position. In the Sigma-7Siec-based family of products, the absolute encoder offset is stored in EEPROM memory instead of battery-backed RAM as with other products. Writing the offset to flash takes more time than writing to RAM. If the process is interrupted, ErrorID 4422 will be reported.	Set Incremental Encoder Mode OR avoid the rapid Move-Set Position sequence when programming applications for Sigma-7Siec-based products where absolute encoder is required.

1231	Request to allow Jog function to change direction on-the-fly	Previously, Jog parameters such as Accel, Decel and speed were allowed to be changed while running, however the jog direction was not allowed to change unless the user came to a stop first and re-executed the MAJ_Yaskawa AOI with a new direction setting. Starting in embedded software version 2.2, Jog direction is also allowed to be changed on-the-fly. Simply change the AOI input parameter for direction while holding the EN input true.
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SigmaLogic AOI for RSLogix 5000 v2.0.0

7. New Features

Number	Summary	Release Notes
374	Transmit P-OT, N-OT and HBB status to plc application code	Additional status information has been added for specific SigmaLogic physical inputs. These can be accessed at controller tag 'Axis_Ref'.I.IOStatus. Ethernet/IP: Input DWord[38] Bit26: Positive Overtravel (P-OT) Bit27: Negative Overtravel (N-OT) Bit28: Hardware Base Block (HBB)
383	Homing AOI - display order of MAH inputs to reflect the chronological sequence of the homing routine	MAH_Yaskawa now has a different order for the inputs that better reflects the homing process. CAUTION: Existing applications should inspect the instances where this block is used. Tags and/or data placed on the inputs will need to be relocated or unexpected results will occur.
736	Transfer External Encoder Position to the PLC	Starting in AOI v200 the External Encoder Position and Speed is reported to the host PLC. The values are available at the MCFG_Yaskawa outputs: - 'MCFG_Ref'.ExtPositionFB - 'MCFG_Ref'.ExtSpeedFB The position of the external encoder may be defined using MAHSP_Yaskawa and setting the UseExternalEncoder parameter to 1.
884	Decode of Alarm messages in MCFG_Yaskawa has a negative impact on execution time	A New AOI has been created: MRSE_Yaskawa - Motion report Servo Error. The parsing of the string data for the error message has been moved out of the MCFG_Yaskawa AOI and into this new AOI. This allows the decoding of the message to occur on-demand and saves a great deal of execution time for the project. When triggered, the verbose error description will appear at the controller tag 'Axis_Ref'.I.AlarmText.
974	Add support for C-Pulse only Homing types to MAH_Yaskawa AOI	Support for Homing to C-Pulse Only has been added to MAH_Yaskawa by selecting Home Type 4. A separate parameter determines the direction.

8. Bug Fixes

Number	Summary	Release Notes
851	Occasional Improper Jog functionality	Rapid re-execution of the MAJ_Yaskawa AOI would sometimes cause the axis to either stop moving without restarting OR start moving without stopping. Adjustments to both the AOI v2.0.x and the SigmaLogic Embedded Code v2.0.x have improved the interlocking and Error Code display to prevent this situation and properly alert the user. If the EnableIn input is toggled and re-applied while the axis is still decelerating, the existing outputs will remain functional until the move is complete. Then all outputs will shut off except EN will be re-applied. DN will NOT come on. This means that the command has not been successfully sent/received. Simply toggle the EnableIn of the function block to make another attempt. Note that any Application Error Code will remain reported at the MCFG_Yaskawa block until MAFR_Yaskawa is executed.
863	MAM_Yaskawa AOI: IP output bit is stuck on when the motion is interrupted with MAS_Yaskawa AOI	Starting with MAM_Yaskawa v2.0.x and SigmaLogic Embedded Code v2.0.x , move interlocking and AOI output functionality has been improved. MAM_Yaskawa outputs will remain functional until the move is complete even if EnableIn has been removed. If MAM_Yaskawa is interrupted by MAS_Yaskawa or a servo off condition, the EN will remain ON, DN will remain ON, IP will turn OFF, PC will never come on.

9. Known Issues

None