



Release Notes for MPiec controller firmware

Release 2.3.0 build 61

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1. New Features

Version 2.3 is the first to support the MP3200iec controller.

2. Bug Fixes

The following issues were identified and fixed for this release.

Number	Summary	Details and workarounds prior to this version
6937	Sigma II drives with absolute encoders generate an alarm at startup.	In release 2.1.0, a change was made to improve the absolute encoder read method, but the improvement was not fully compatible with the Sigma II amplifiers. This incompatibility has been corrected, now absolute data from Sigma 5 and Sigma II amplifiers are read correctly.
6998	MP2600iec:SubnetMask of 255.255.254.0 not valid on CN11A	Customer using subnet mask other than 255.255.255.0 could not communicate to devices on another subnet.
7026	MC_Direction#CurrentDirection is not controlling the axis in same direction if non aborting buffer mode is used	MC_MoveAbsolute, when used with a rotary axis and Direction input = current_direction, should now choose the correct direction for both aborting mode and blending modes. However if buffered mode is specified, then motion stops between moves and there is no "current" direction. In this case it defaults to move in the positive direction.

3. Known Issues

Number	Summary	Release Notes	Workaround
4395	Large positions will not be displayed to full precision in the Web Server Java applet or the Hardware Configuration.	Positions greater than 2147483648.0 are written in scientific notation and will lose some precision when displayed in the applet or the Hardware Configuration. The position stored in the controller is not affected.	If possible, change the origin using MC_SetPosition or MC_StepRefPulse or change the position scale so that the full position can be seen.
4641	starting in supervisor mode shows extra web menu options	When controller is started in supervisor mode, the web menu shows all of the supervisor options immediately. Some options will require login before they can be used.	Login with the Admin password in supervisor mode.

Number	Summary	Release Notes	Workaround
5227	XML Config files are cached via web server	Deleting a project archive and uploading a new project appears to show user/config/startup/io.xml not updated to the new version. Actually it is updated, however the web browser has cached the old version.	Disable caching of XML config files in Internet Explorer.
5241	ProConOS communication task can use all available CPU with large OPC transfers	With large OPC transfers, the ProConOS communication task can starve lower priority tasks, making communication with MotionWorks IEC difficult. We have also noticed a 32KB limitation on OPC transfers.	Use smaller buffers and slower update rates.
5373	Controller hangs at startup with two Sigma II drives at the same physical node address	The ERR and MTX light will come on. This problem does not occur with Sigma V drives.	Ensure each Sigma II drive has a unique physical node address.
5521	CPU utilization is not accurate for MP2600iec when the IEC task and motion engine cycle are the same.	The CPU utilization always reports 0.1% when an IEC task runs at the same rate as the motion engine. To get more accurate utilization data, the scheduler must run more often than the user task and the user task must continue to execute over multiple scheduler cycles.	The individual task statistics MinDuration_us, CurDuration_us, MaxDuration_us stored in PLC_TASK_1 (etc.) are reported in microseconds, which is more useful for determining watchdog timers for tasks running at the same rate as the motion kernel.
5697	Slave cannot synchronize to a master with S curve applied	Cam and Gear applications will not follow another servo axis that has the S curve filter enabled.	Do not use an S-Curve filter on any master axis unless the slave has an identical S-Curve filter.
5724	PLC will enter the RUN state after a test move finishes in the Hardware Configuration	When attempting to start a program using the Project Control dialog while running a test move through the Hardware Configuration, the controller correctly prevents the PLC from entering the RUN state. In this case the resource dialog still shows the PLC in the RUN state as the request to enter RUN mode is pending. When the move finishes the PLC will enter the "RUN" state.	Do not RUN the PLC when the Hardware Configuration is performing a test move.
5915	Trying to enable the same axis with two MC_Power blocks at the same time results in internal motion kernel error.	Trying to enable the same axis with two MC_Power blocks at the same time results in internal motion kernel error.	Do not enable multiple MC_Power blocks on the same axis at the same time.
5965	If the SGD V is configured to use the Brake output on SO1, then none of SO1, SO2 or SO3 can be controlled over Mechatrolink.	SGDV firmware was changed	No workaround exists.
6036	Y_CamShift.Error remains high after Execute goes low	If there was an error, Y_CamShift Error and ErrorID remain high after Execute goes low.	
6343	EIP Multicast only works correctly on Port A (CN11A) of the MP2600iec.	Multicast Ethernet I/P data will only be broadcast over Port A (CN-11A). Consequently, Port B (CN-11B) should not be used for Ethernet I/P communication.	Use Port A (CN-11A) for Ethernet I/P communication.

Number	Summary	Release Notes	Workaround
6473	Repeated archiving operations eventually breaks archiving	Typically, the controller is rebooted immediately after sending the project archive, but if an archive project is sent to the controller more than 20 times in a row, then the controller starts failing semi-silently. There is no alarm or warning, but the Debugging Output starts to print the following error: [2011-07-07 15:39:39.210] error invoking web post request. FilteredZip Could not open specified archive	Reboot the controller.
6481	Different deceleration is used for MC_TorqueControl than for MC_Move... when a software limit has been exceeded.		If the axis does not decelerate quickly enough after exceeding a soft limit with MC_TorqueControl, then modify parameters Pn80D, Pn80E, Pn80F and Pn827.
7017	218IF-Y1 communication card is not supported on the MP3200iec	The MP3200iec firmware version 2.3 does not support the 218IF-Y1 communication card.	
7081	MIN, MAX and LIMIT with 64 bit data types when using EN/ENO are not supported on MP2600iec and MP3200iec		Create custom functions in ST or use functions from the Yaskawa and Math Toolboxes.

4. Limitations

Unsupported Card Modules

JAPMC-PL2300-E Counter Module
 JAPMC-PL2310-E Pulse Output Module

Unsupported Mechatrolink Devices

SGDH & NS115 with Linear Motor
 JEPMC-PL2900 Counter Device
 JEPMC-PL2910 Pulse Output Device