

Snapshot-XPS-RL-D_N16006 (2024/08/27)

Improve configuration protocol security. Issue accessing the Public folder

Hardware

- XPS-RL-D model.

Firmware: XPS Unified V1.8.6

Web site: XPS-D 2.4.3

XPS-Unified Package: Version [#48A-20240827](#)

Stage data base: V4.3.17 (September. 19th 2023 - ECO5770)

- Refer to document "XPS-D-RL-StageDataBaseHistory.pdf"

Snapshot-XPS-RL-D_N16005 (2024/06/27)

Hardware

- XPS-RL-D model.

Firmware: [XPS Unified V1.8.6](#)

- 1.8.6
 - Fix PSO timeflasher don't work with aquadB encoders.
 - Fix number of timeflasher pulses lower than awaited number of pulses.
- 1.8.5.3
 - Fix wrong value of ExternalLatchPosition when used with an AquadB encoder.
- 1.8.5.2
 - Fix PositionerPositionCompare APIs doesn't work.

Web site: [XPS-D 2.4.3](#)

- The space characters contained in the default name of a TCL script generated from the terminal panel are replaced by underscore characters.

XPS-Unified Package: [Version #48-20240626](#)

Stage data base: [V4.3.17 \(September. 19th 2023 - ECO5770\)](#)

- Refer to document "XPS-D-RL-StageDataBaseHistory.pdf"

Snapshot XPS-RL-D_N16004 (August 2023)

Hardware

- XPS-RL-D model.

Firmware: [XPS Unified V1.8.5](#)

- 1.8.5
 - Add a new parameter "**TrajectoryBufferSize**" in **GENERAL** section of **system.ref** file to resize PT/PVT trajectory buffer size. **Default value must be 100.**
 - Fix **PlusEndOfRunHomeSearch** issue. Bad computation of the offset of the home position.
 - Fix **positionerPositionCompare** functionality which didn't work with AquadB encoders.
- 1.8.4
 - Fix **XYScanMoveAbsolute** API. The Y movement was done too early.
 - Add **AvailableRamMemory** gathering data.
- 1.8.3
 - Fix **XYZ** group infinite initialization due to a missing timer **when initialization sequence is not "Together"**.

Web site: [XPS-D 2.4.2](#)

- Fix relative move from tuning page.

XPS-Unified Package: [Version #44-20230829](#)

Stage data base: [V4.3.16 \(April. 17th 2023 - ECO5699\)](#)

- Refer to document "XPS-D-RL-StageDataBaseHistory.pdf"

Snapshot XPS-RL-D_N16003 (January 2023)

Hardware

- ✓ XPS-RL-D model.

Firmware: *XPS Unified V1.8.2*

- ✓ 1.8.2
 - Enable PDSA only if **PDSAINputSensorBit** parameters exists in the first **MultipleAxes** group in system.ini -> **this change in previous version of main controller was not properly done.**
 - **Fix crash** of the controller with **certain configurations** when **PDSA** is **enabled**.
- ✓ 1.8.1
 - Enable **PDSA** only if **PDSAINputSensorBit** parameters exists in the first **MultipleAxes** group in **system.ini**.
- ✓ 1.8
 - Fix run away during initialization for **XY**, **MultipleAxes** and **XYZ** group. For **XYZ** group, the run away is not fixed for together initialization.
 - Fix **XYLineArcVerification()**. When the API returned an error, future calls to this API returned the same error even if the trajectory is correct.
 - Add **CRC** error.
 - Edit **STR_DRV_STATUS_TG_OPEN** : "TG is opened or no stage connected or command CRC error"
 - Fix **GatheringExternalStopAndSaveAPI()** : external gathering was saved in gathering.dat instead of gatheringExternal.dat.
 - Fix the error that if the API did not exist for the required group, it was indicated that the API did not exist. Even though it existed perhaps for another group.
 - Fix the error that if the API was used with bad condition (Secondary positioner, config standard instead of Precision platform ...), it was indicated that the API did not exists. Even though it existed perhaps for another group.
- ✓ 1.7.2.9
 - Fix slope issue in **Sgamma** profiler to enable **PostKFeedForward**.
- ✓ 1.7.2.8
 - Fix **FatalFollowingError** issue while moving for a long time (ex. Spindle mode) due to CIE position counter overrun.
 - Add possibility to read configuration parameter in simple **mathematic expression format** (m*n/p/q*r*s/t*u/v....) .
 - Add **new API error** codes:
 - **-86**: "Home search index error".
 - **-220**: "Number of TCL script files exceeds limit".
 - **-221**: "Number of trajectory files exceeds limit".
 - **-222**: "Action not allowed because the positioner corrector is in Option 0".

- Returns error **-36** ("Unknown TCL file") if **TCLFileName** or **TaskName** contains any spaces or tabulation, for the following APIs:
 - **TCLScriptExecute()**.
 - **TCLScriptExecuteAndWait()**.
 - **TCLScriptExecuteWithPriority()**.
- **GatheringDataMultipleLinesGet()** returns error **-3** ("String too long") if the data collection buffer exceeds **65535** bytes.
- Change error code from **-8** to **-222** ("Action not allowed for secondary positioner that is in Option 0") for the APIs:
 - **PositionerExcitationSignalSet()**.
 - **PositionerExcitationSignalCorrectorOutSet()**.
- Correct output data of the API **EventExtendedGet()**.
- Add new line in **/Admin/Public/system.ref** to configure **DebugTraceCommunication** feature:


```
[GENERAL]
DebugTraceCommunicationTraceAll = ; Enabled or Disabled
```
- The **gantry index** difference is calculated in relation to Encoder positions instead of Corrected SetPoint positions.
- Improve **GroupPositionCurrentGet()** to make it working with XY gantry configuration.
- ✓ 1.7.2.62
 - Add **MotionDoneCumulativeConfirmationTime** parameter in GENERAL section of firmware.ref. Calculate motion done time as SPX version.
- ✓ 1.7.2.5
 - Fix problem of data lost with API **GatheringDataMultipleLinesGet()**.
 - Fix problem of file saving synchronization with API **GatheringStopAndSave()**.
 - Add APIs:
 - **PositionerMagneticTrackPositionAtHomeSet()**.
 - **PositionerEncoderLinearCorrectionGet()**.
 - **PositionerEncoderLinearCorrectionSet()**.
- ✓ 1.7.2.2
 - Improve API **GatheringDataMultipleLinesGet()**: create a thread to not disturb ISR interrupts during API execution.
 - Improve API **GatheringStopAndSave()** and **GatheringDataMultipleLinesGet()**: make API waiting until data getting or saving end before return to user.
- ✓ 1.7.2.1B
 - Add a new gathering data:
 - **TimeFromBoot**: The time in second from the boot of the XPS.

Web site: [XPS-D 2.4.0](#)

- 2.4.0
 - Fix display of TCL response in FunctionalTest graph (manual change not in SVN).
 - Fix endless loading of documentation page.
- 2.3.9
 - Fix "Front Panel" page display problem.
- 2.3.7

- *Fix “Lissajous” page display problem.*
- 2.3.6
 - Fix problem of files / configurations files / load config and save config.
 - Fix problem of result data display in “Functional Test” page.
 - Fix problem of special character used in TCL programs.

XPS-Unified Package: [Version #40A-20221117](#)

Stage data base: [V4.3.14 \(September. 13th 2022 - ECO5608\)](#)

- ✓ Refer to document “XPS-D-RL-StageDataBaseHistory.pdf”

Snapshot XPS-RL-D-N16002 (Oct. 2020)

Hardware

- ✓ XPS-RL-D model.

Firmware: XPS Unified V1.7.1

- ✓ No change.

Web site: XPS-D 2.3.1

- ✓ No change.

XPS-Unified Package: Version #26-20191107

- ✓ **No change.**

Stage data base: [V4.3.7 \(Oct. 1th 2020 - ECO5308\)](#)

- ✓ No change.

Manuals

- ✓ EDH0420En1010 (XPS-RL-D - Start-Up Manual)

File configuration

- ✓ No change.

Snapshot XPS-RL-D-N16001 (Nov. 2019)

Coming from XPS-D-N13018 snapshot (described below) with the following changes:

- *Configuration file (firmware.ref) for XPS-RL-D controller.*
- *Documentation files for XPS-RL-D controller.*

Hardware

- ✓ XPS-RL-D model.

Firmware: [XPS Unified V1.7.1](#)

- ✓ No change.

Web site: [XPS-D 2.3.1](#)

- ✓ No change.

XPS-Unified Package: Version [#26-20191107](#)

- ✓ **No change.**

Stage data base: V4.3.6 (Nov. 19th 2019 - ECO5226)

- ✓ No change.

Manuals

- ✓ [EDH0420En1010 \(XPS-RL-D - Start-Up Manual\)](#)

File configuration

- ✓ No change.

Snapshot XPS-D-N13018 (Nov. 2019)

Hardware

- ✓ XPS-D model.

Firmware: [XPS Unified V1.7.1](#)

- ✓ Add PDSA APIs :
 - *MultiplePDSAAxisByAxisExecution()*
 - *MultipleAxesPDSASpiralStepExecution()*
 - *MultipleAxesPDSASpiralContinuousExecution()*
 - *MultipleAxesPDSARasterExecution()*
 - *MultipleAxesPDSADichotomyExecution()*
 - *MultipleAxesPDSAEscaladeStepExecution()*
 - *MultipleAxesPDSAEscaladeContinuousExecution()*
- ✓ Fix problem of group status (MOVING, TRAJECTORY, ...) lost during EmergencyBrake
- ✓ Manage EtherCAT PP mode for all groups
- ✓ Correct Jog profiler calculation to improve reaction of API GroupJogParametersSet()
- ✓ Fix problem of stage run away when jogging at very low velocity (< 1e-14 units/s)
- ✓ Fix problem of wrong parameter number (error -9) in API PositionerCompensatedFastPCOPPrepare() (PP only)
- ✓ XY Clamp: Remove system.ini ClampInputMode and ClampOutputMode parameters (PP only)

Web site: [XPS-D 2.3.1](#)

- ✓ Bugs correction.

XPS-Unified Package: Version [#26-20191107](#)

- ✓ **Firmware:** [XPS Unified V1.7.1](#)
- ✓ **External module templates:**
 - *Basic external module template: V1.0.0 – N1*
 - *EtherCATSlaveCiA402 external module template: V1.0.0 – N1*
 - *ExternalInterlockA external module template: V2.0.0 – N1*
 - *LaserModulation external module template: V1.0.0 – N1*
 - *ShutterInterlock external module template: V1.0.0 – N1*
- ✓ **Web site:** [XPS-D 2.3.1 \(20191104\)](#)
- ✓ **QNX kernel:** [QNX kernel configuration V3.0.22](#)
- ✓ **TCL interpreter:** [V1.7.x](#)
- ✓ **Software drivers:** [V2.1.2.0 \(DLL .NET 2.1.2 for XPS Unified firmware V1.7.x\)](#)
- ✓ **LoadModules:** [V1.2.3](#)
- ✓ **GetTCLTaskNameList:** [V1.0.1](#)
- ✓ **InitializelP:** [V2.0.1](#)
- ✓ **RestartApplication:** [V1.0.15](#)
- ✓ **ResetMotors:** [V1.0.1 \(not used\)](#)
- ✓ **Manuals:** [XPS-D, XPS-Unified](#)

Stage data base: [V4.3.6 \(Nov. 19th 2019 - ECO5226\)](#)

- ✓ Refer to document "[XPS-D-RL-StageDataBaseHistory.pdf](#)"

Manuals

- ✓ [EDH0373En1025 - V1.7.x \(XPS Unified - Programmer's Manual\)](#)
- ✓ [EDH0395En1040 \(XPS-D - Start-Up Manual\)](#)

- ✓ EDH0405En1012 (XPS-D - User Interface Manual)
- ✓ EDH0406En1012 (XPS-D - Configuration Manual)
- ✓ EDH0407En1032 (XPS-D - Features Manual)

File configuration

- ✓ ***objects.ini: V4.3***