KINGSTAR 3.5

SOFT MOTION RELEASE NOTES

KS-DOC-X64-0015-R17

IntervalZero

KINGSTAR IntervalZero

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KINGSTAR Soft Motion 3.5 release notes

New features

The following new features and improvements are available in this release:

NOTE: Reference numbers, [KS–<XXX>], are for internal tracking purposes.

- Add new supported hardware:
  - Servo drives
    - Beckhoff EL7201-0011 [KS-786]
    - ESTUN ProNet-EC [KS-767]
    - Festo CMMP-AS-C2-3A-M3 [KS-783]
    - Festo EMCA [KS-806]
    - Han's Robot D-Module Series Modular [KS-737]
  - Stepper drives
    - TPM STP-K121-KIT [KS-685]
  - EtherCAT I/O modules
    - Beckhoff EK1122 EtherCAT junction [KS-772]
    - Inovance AM600 [KS-794]
    - TPM 207-D240-NX, 207-D204-XN, 207-D222-NN, 207-A202F, 207-A202FH, 207-A203F, 207-A204F, 207-A220FID, 207-A220FD [KS-758]
- Add **`WriteControlModeAsync`** in the .NET Class interface. [KS-644]
- Add **`MC_GroupJog`** and **`MC_GroupInch`** to group motion. [KS-657]

- Add KINGSTAR PLC Runtime to the KINGSTAR Soft Motion Runtime installer. [KS-753]
- Add KINGSTAR LogicLab and KINGSTAR Control Panel. [KS-750] [KS-791]

Updates

- For .NET Class, add the **`WriteControlModeAsync`** to the Axis class instead of using the **ControlMode** property to write. [KS-644]
- Allow **Position** and **Distance** continuous to be updated in single axis. [KS-742]
- Create `ksio64ks.rtdll` to allow users who already have used KINGSTAR EtherCAT to develop their applications can use KINGSTAR Soft Motion functions when they upgrade to KSM. [KS-748]
- Bypass SDO commands in MC commands for simulated drives. [KS-766]
- Add homing mode in Tuning Console: Axis Configuration > Homing. [KS-769]
- Handle the change failure of mode of operations. [KS-784]
- Support RTX64 3.4. [KS-813]
- **`SetServoAlias`**, **`SetIOAlias`**: The alias index can be outside the index range. [KS-846]
- **`MC_GroupHalt`** should be able to stop all axes in a group. [KS-857]
- ISaGRAF Soft PLC support ends as of KINGSTAR 3.5.

Fixes

- Calling group's Halt or Stop during deceleration overshoots the target. [KS-755]
- When the group status is "GroupErrorStop," sending **`MC_GroupEnable`** will get the "Done" status. [KS-761]
- In NetApiInterface Sample, the UI that controls I/O modules becomes unavailable after clicking **Start**. [KS-763]

- CANopen's PDO doesn't work properly. [KS-764]
- Motion commands cannot receive previous command's last moving direction occasionally. [KS-777]
- **`MC_SetOverride`**'s **AccFactor** and **JerkFactor** can be zero. [KS-778]
- In the .NET API interface, when using **`ConfigLinkedDevice`** to configure a CANopen slave, the error "Index was outside the bounds of the array" occurred. [KS-789]
- In the RT, Win32 and .NET API interface, **`AbortHoming`** is not working for the homingSlave mode. [KS-798]
- Remove `RtxInterface.rtss` in the KINGSTAR bin folder after installing KINGSTAR Soft Motion Runtime. [KS-802]
- The group state does not change after the group motion command is terminated by motion errors or wrong axis states. [KS-803]
- An error occurs when KINGSTAR .NET Class Sample is started. [KS-815]
- In the .NET API interface, if start-up SDO commands are sent during manual setting of devices, the exception of the out-of-range index occurs. [KS-816]
- In the RT API interface, the return message of **`GetServoStatus`** is incorrect. [KS-823]
- The slave homing fails when it is used second time. [KS-824]
- SetMaxSensor and SetMinSensor doesn't stop the axis' move in the SensorLimit mode. [KS-838]
- **`MC_GroupHalt`** doesn't stop the motion after the group is disabled. [KS-843]
- The group axes move to a non-tangential direction when calling group's Halt or Stop during deceleration. [KS-850]
- **`MC_Stop`** and **`MC_GroupStop`** cannot stop a grouped axis that has received a single-axis moving command. [KS-866] [KS-868]
- The program stops responding when acceleration, deceleration or jerk is too small and the max velocity is too high. [KS-871]

- The **Skip** button in the SDK installer is placed at the same location as the **Next** buttons. [KS-885]
- The syntax in **`SetServoInterpolation`** in RT_Win32 is incorrect. The second parameter should be `int Cycle`. [KS-951]

Known issues

- If Error 1618 occurs during the installation or uninstallation of KINGSTAR Runtime or SDK, the installation or uninstallation terminates. In this case, RTX64 Runtime or SDK is still being installed or uninstalled in the background.
  - To completely install the KINGSTAR product, launch the KINGSTAR installer again after RTX64 components are completely installed. To check if RTX64 is installed or uninstalled, go to **Control Panel** > **Programs** > **Uninstall a program** and see whether RTX64 components appear.
  - To completely uninstall the KINGSTAR product, go to **Control Panel** > **Programs** > **Uninstall a program** and check whether RTX64 components disappear. It they do, uninstall KINGSTAR Runtime or SDK.

  Do not shut down or restart the computer during the RTX64 installation or uninstallation, it may damage the system. [KS-884]

Get support

KINGSTAR offers a number of support options for KINGSTAR users, including third-party, online and phone support.

Third-party support

If you are a customer who purchased a KINGSTAR product through a third-party reseller, contact the reseller for support.

Online support

The KINGSTAR Customer Support web page is located at:

http://kingstar.com/support/

The KINGSTAR support web pages provide electronic access to the latest product releases, documentation, and release notes. You can access the online support ticketing system to submit issues or questions.

Before calling technical support

Please have the following information ready before calling KINGSTAR Technical Support:

The version number of your RTX64 and KINGSTAR software

To obtain the RTX64 version number:

1. Click **Start** > **All Programs** > **RTX64 3.4 Runtime** > **Control Panel**.
2. In the **RTX64 3.4 Control Panel**, record **Version** shown in the **Runtime Information** area.

To obtain the KINGSTAR version number:

1. Click **Start** > **All Programs** > **KINGSTAR** > **Runtime**.
2. In **Windows Explorer**, click the `ksm64.rtdll` file, and right-click the same file again.
3. On the shortcut menu, click **Properties**.

4. In the **ksm64.rtdll Properties** window, click the **Details** tab, and record **Product version**.

Phone support

For technical support related to installing and using KINGSTAR, please call technical support at this number:

+886-2-2556-8117

Hours are Monday – Friday from 9:30 to 17:30, UTC+08:00, excluding holidays.