



ConveyLinx-Ai firmware revision changes

5.03.0 to 5.04.0

Release date 29.06.2018

1. Improvements

- Added proper Speed Code 8 support
- ConveyLogix Instances added in ProfiNet and EtherNet/IP for ConveyLinx-Ai and ConveyLinx-IO
- CC-Link - ConveyLinx-IO added in possible slave station cyclic data.

2. Bug fixes

- Various small ConveyLinx-Ai2 working with ConveyLogix issues were fixed.
- The module now forms the correct connections in ZPA mode with Profinet PLC configuration. No power reset is needed after the initial discovery.
- Fixed an issue where the module will not accept connect request over Profinet for a Hilsher PLC.
- In a specific situation the rollers of a module in ZPA mode would run at 50% speed after PLC reconnect (with PLC configuration)

5.02.1 to 5.03.0

Release date 20.04.2018

1. Improvements

- In the Reduced ZPA data assemblies, two of the reserved fields are now used for ConveyStop Control.
- Now it is possible to make one of the motors a slave to the other and reverse the direction of the slave. The command is integrated in the process data. Very useful for the situation of two motors in one roller.

2. Bug fixes

- When a module is viewed in EasyRoll's diagnostic screen, the module might reset. Rare occurrence.
- The Clear JAM button and bit will now clear the jam, even if the Auto-Clear timer is already running.
- If the speed is changed multiple times very fast(<10ms), the new speed settings are not accurately reflected.
- A small hiccup effect was visible when changing the Brake mode while the motor is running. Largely cosmetic issue.
- Brake mode will now take its Hold position from its current position, when Servo Brake is activated while the motor is stopped.



5.02.0 to 5.02.1

Release date 22.02.2018

1. Bug fixes:

- Wrong I/O data after restart of the module, when working with ConveyLogix in CC-Link – bug fixed.

5.01.1 to 5.02.0

Release date 15.02.2018

1. Improvements:

- ConveyLogix tags visible via Input and Output data of CC-Link IEF Basic protocol, when there is PLC program running inside the module.

4.22.2 to 5.01.1

Release date 21.12.2017

1. Improvements:

- The Profinet communication stack is updated to conform to Profinet V2.32.
- The EthernetIP is updated to pass the latest EthernetIP version certification test.
- Communication protocol CC-Link implemented.

4.22.1 to 4.22.2

Release date 18.12.2017

1. Bug fixes

- Problem with unicast MAC addressing in large systems solved.

4.21.0 to 4.22.1

Release date 01.12.2017

1. Improvements:

- Added support for PMD and PGDN motor types.

2. Bug fixes

- Fake Confirm Bit won't work – bug fixed.
- Left motor Touch&Go sensitivity won't work - bug fixed.
- Diagnostic Log - when module is powered ON, the module reports fake CPU overheat - bug fixed.



4.20 to 4.21.0

Release date 27.10.2017

1. Improvements:

- Added support for bi-directional 2-sensor conveyors.
- Added BUG_REVISION to major and minor revisions indication.

2. Bug fixes

- When new servo command is started and the previous one wasn't complete, there was unwanted behaviour of the motor – bug fixed.

4.19 to 4.20

Release date 06.10.2017

1. Improvements:

- Disable Motor Digital Output mode.
- Added new instance for ZPA extended mode: standard ZPA instance + Sensor Detect + Accumulation Reason Left/Right. Generated new EDS file ConveyLinxAi_V1_6.eds.

2. Bug fixes

- When PLC is disconnected send STOP command to Move by Pulses (Servo) function.
- There was a bug when configuration of LaneFull on pin2 sensor port is at the same time with PLC configuration – fixed.
- Colisions between Left/Right zone with Central zone avoided in Merger mode – bug fixed.
- Added separate timers for Arrival jam and Full-run jam.
- When belted configuration is selected in PLC topology configuration, now is possible to set different settings for left and right motor.
- When InductTime is used for long distances, adjustment to the internal timer is added.

4.18 to 4.19

Release date 16.06.2017

1. Bug fixes

- Fixed Sensor Gain Error indication in Diagnostic Registers (88 & 89) when ZPA mode.



4.17 to 4.18

Release date 23.05.2017

1. Improvements:

-Maximum size of firmware file increased to 450 Kb (was 382 Kb).

2. Bug fixes

-Improved servo functionality precision when the motor's direction is changed without stopping the motor.

4.16 to 4.17

Release date 10.03.2017

1. Improvements:

- ConveyLogix functionality added for ConveyLinx-IO devices.
- Added Performance bit in MotorStatus for all Motor Types.
- The network tool PRONETA now correctly displays the topology of ConveyLinx-Ai2 devices.
- Motor Information Fields at Modbus addresses 4:10000 for left motor and 4:10100 for right motor are available from Message instruction in EtherNet/IP communication protocol.
- Diagnostic bits for peer connect status added for ConveyLinx-IO devices.

4.15 to 4.16

Release date 23.12.2016

1. Improvements:

- Added Motor Minimum and Maximum Possible Speed in EasyRoll->Diagnostic screen.
- Sensor Diagnostic shown in EasyRoll ->Diagnostic log.
- Recognizing PMD motors.

2. Bug fixes

- Added protection in EtherNET/IP for connection requests with zero input length.
- Maximum time for Sensor Debounce timer was changed from 1 sec to 2 sec.

4.14 to 4.15

Release date 07.10.2016

1. Improvements:

- Factory Defaults sets parameters for different device default motor types.
- Added System diagnostic entries after PLC connects and disconnects via Modbus.
- IP source address of the PC, used for messages regarding Module Lock Functions and DHCP Disable option, is checked whether or not is in the same network of the module. If it is not, module response is broadcast message.
- When used with PLC configuration and Topology in ZPA mode, in order to build module-to-module connections, a power reset was required. Now a power reset is not required.



2. Bug fixes

- JAM timer is reset when there is Accumulation and it is started from zero after the Accumulation is clear. Before that JAM timer was only paused during Accumulation.
- After Accumulation from pin2, there was problem with LED indication of the sensor port. Fixed.
- After FullRunJAM, there was problem with LED indication of the sensor port. Fixed.
- When motor status is UNUSED, continuous error messages were received in Diagnostic buffer. Fixed.

4.13 to 4.14

Release date 15.09.2016

1. Improvements:

- Diagnostic buffers in RAM, added in separate window in EasyRoll, where information about time of every event can be find.

2. Bug fixes

- If Set_New_Speed and Stop_Command are receive together, deceleration ramp work properly.

4.12 to 4.13

Release date 19.08.2016

1. Improvements:

- Diagnostic buffers in RAM, added in module Backup file – there are two buffers, one describing Motor status and errors and one for System diagnostic (PLC connect/disconnect, Communication errors).
- Ethernet packet is no more checked for wrong length size in IP header field.
- Added CustomerID check in Register 19 – between module and MDR (bit 12) and between the module and its neighbor (bit 13).
- Activated neighbor recognition based on Customer coding in Register 6.

2. Bug fixes

- When configured through Profinet topology method in PLC mode, module not always sets its motors to USED. Fixed.

4.11 to 4.12

Release date 11.07.2016

1. Improvements:

- Added new functionalities in ConveyLogix: Left and Right MDR servo position tags; reading the production and preventive maintenance data from Senergy-Ai MDR.



4.10 to 4.11

Release date 17.06.2016

1. Improvements:

- The IP address of the module now cannot be changed, when the module is connected to PLC and is used with PROFINET standard configuration. The Name of the module must be changed first, for the module to allow IP change.
- Added E-STOP functionality for ConveyLinx-IO module.
- E-STOP occurs if motor supply is < 18V or from register 20, even if No E-STOP Group is created.

2. Bug fixes

- On Motor Error - Brake mode was always free. Now is fixed and became Normal if Servo or Normal mode are selected.
- Motor Stalled Error is added to Pin2 Output report ZoneErrors.

4.9 to 4.10

Release date 11.05.2016

1. Improvements:

- Flex zone feature improvement- the flex zone can now work with products longer than 2 zones
- Added support for additional (other than 50) motor tube diameters – 38, 42, 52, 63.5, 76.3, 80mm.
- When the motor is decelerating and the Run command is OFF and the MDR stalls, the remaining deceleration ramp is cleared.
- The “Overload” MDR error can now be cleared with the “Clear motor error” bit.

2. Bug fixes

- Motor diagnostic doesn't show "Motor not Connected" and "Motor error" flags, when motor is unused.
- ZPA mode fixes:
 - When a tote is stolen, while the “Disable arrival jam reset delay” is checked, the following products will stop. Fixed.