



Abstract:

This document provides a step-by-step procedure for enabling counters and counter resets in E3 I/O modules with discrete input pulse counters.

Products:

All E3 I/O Modules with discrete input pulse counters.

- E3-MIX24882-1
- E3-MIX24880-1
- E3-MIX20884-1
- E3-32DI24-1
- E3-16DI24-1
- E3-16DIAC-1

Use Case: Using Counter Reset Bits

When counters are enabled, they can be reset to zero whenever the discrete output counter reset registers are set to ON. When the discrete output counter reset registers are set to OFF, the counters will operate normally.

Required Software:

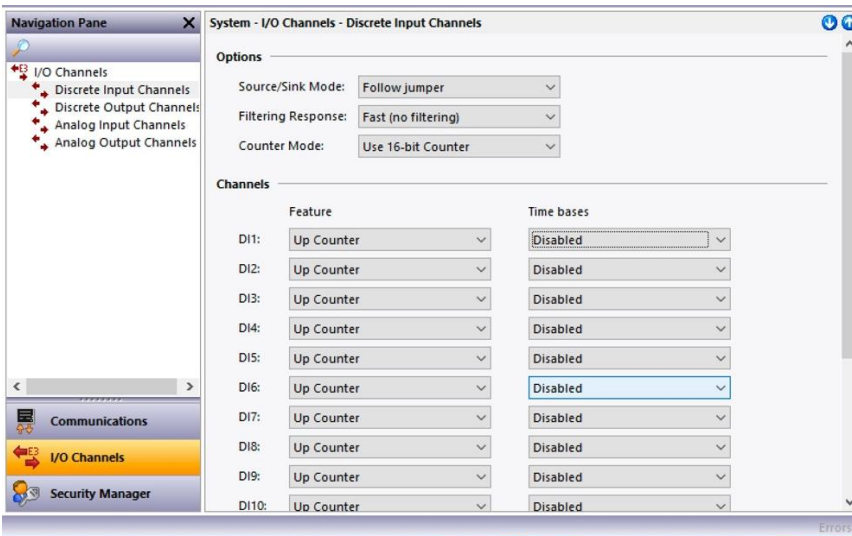
Crimson® 3.0

Required Firmware:

Build 700 or higher

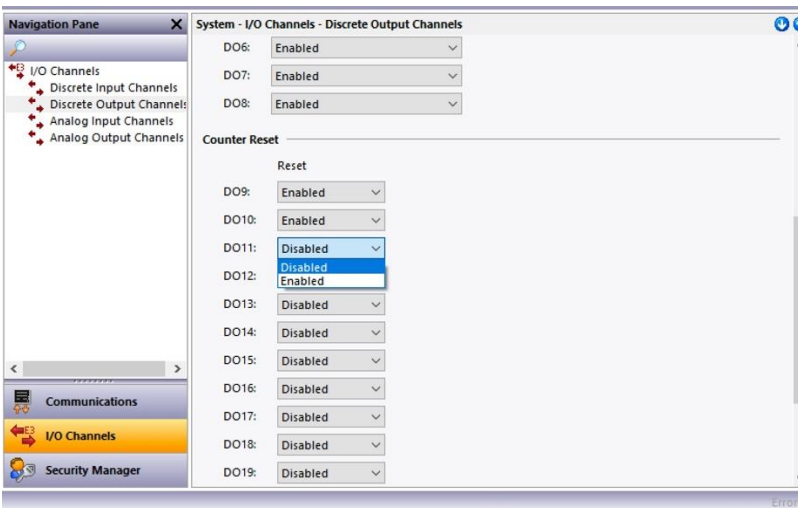
Enable Counting

1. Open or create a new Crimson file for one of the compatible E3 I/O modules.
2. Click on *I/O Channels* in the Navigation Pane.
3. Click on *Discrete Input Channels* in the Navigation Pane.
4. Set the Counter Mode option to *Use 16-bit Counter* or *Use 32-bit Counter*, as applicable.
5. Configure Channels as applicable.



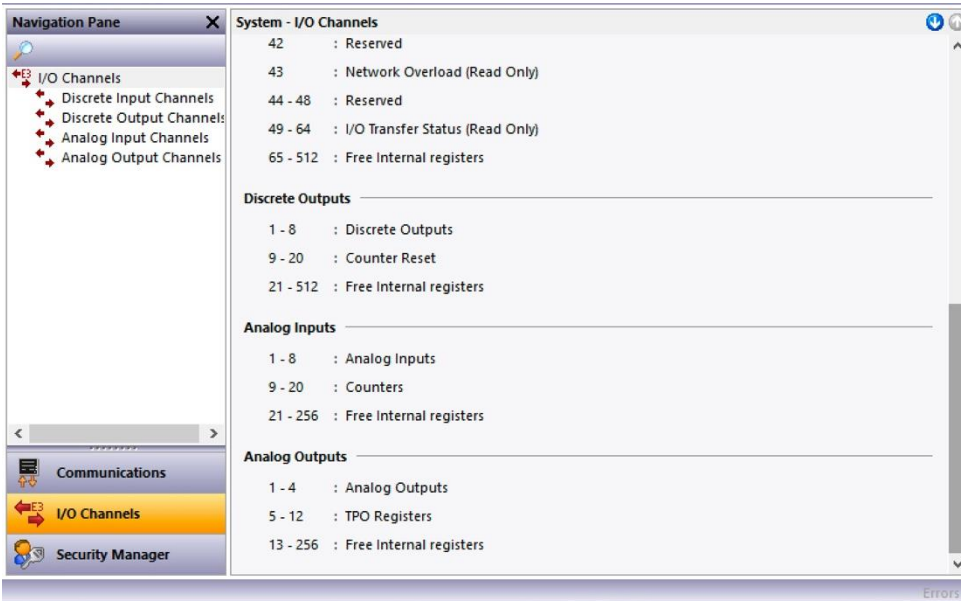
Configure Counter Reset

1. Click on *Discrete Output Channels* in the Navigation Pane.
2. Set the Counter Reset field to *Enabled* or *Disabled*, as needed.



Example Explanation

Each counter reset bit address corresponds to the analog input register address. For example, in the E3-MIX20884-1 AI9 is the counter input address for counter 1, and DO9 is the counter reset address. For counter input 2 the address is AI10, and the reset bit is DO10. And so on for all 12 counter registers. The Analog Input registers and Counter Reset registers for each module may be found in the Navigation Pane under I/O Channels > I/O Channels.



For more information: <http://www.redlion.net/support/policies-statements/warranty-statement>