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Program the I-8093W (3-axis high speed Encoder input module) by ISaGRAF.

[Download FAQ-112 Demo](#)

The following ICP DAS ISaGRAF drivers support the I-8093W module.

WP-8xx7: Ver. 1.13 or later, VP-2xW7: Ver. 1.04 or later, iP-8xx7: Ver. 1.05 or later

ISaGRAF driver:

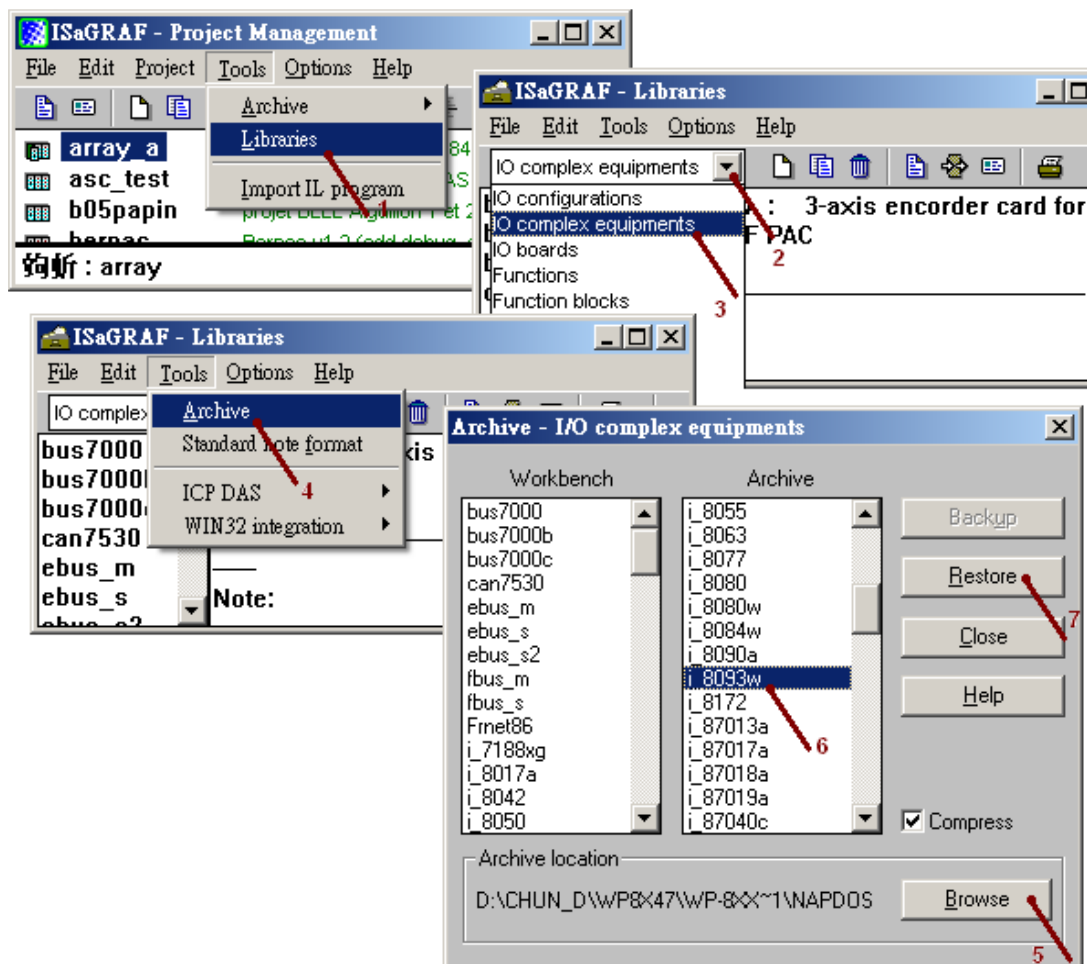
<http://www.icpdas.com/en/download/show.php?num=368&nation=US&kind1=&model=&kw=isagraf>

Data Sheet: <http://www.icpdas.com/en/download/index.php?nation=US&kind1=&model=&kw=isagraf>

I-8093W is a 3-axis high speed Encoder input module. It supports max. 4M Hz input signal for pulse/direction and cw/ ccw input mode, and supports max. 1M Hz for Quadrant (A/B phase) input mode. Please refer to the following web site for more I-8093W hardware information.

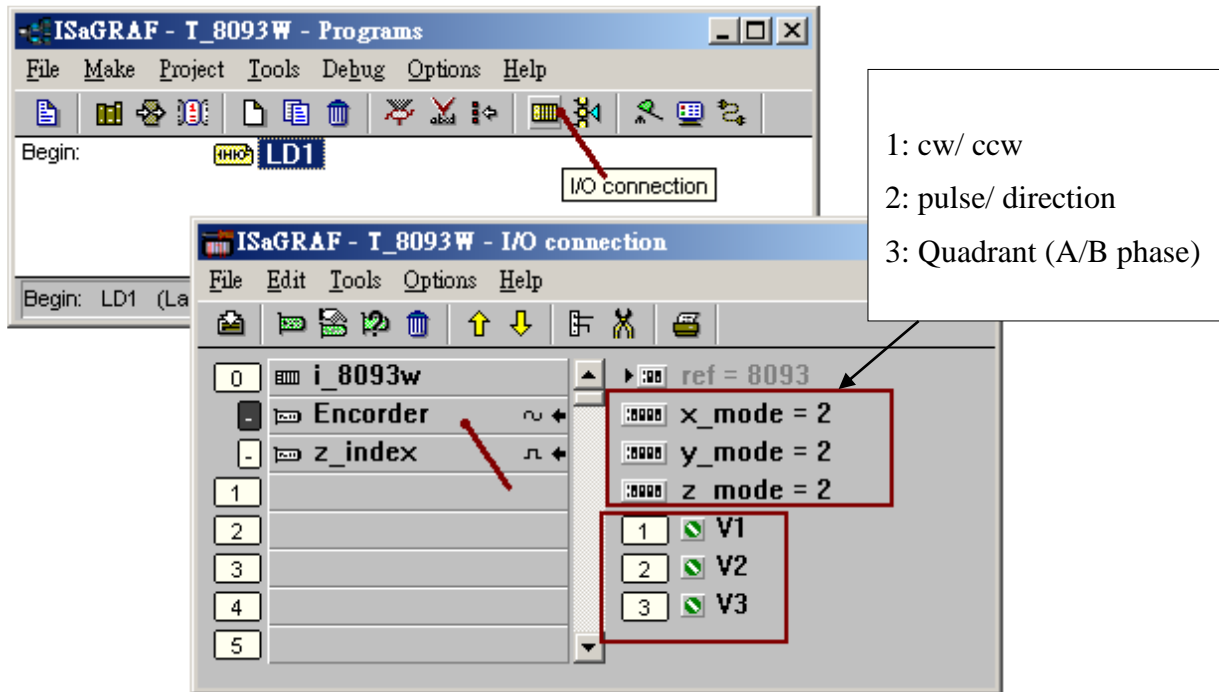
<http://www.icpdas.com/en/product/I-8093W-G>

Please restore the "i_8093w.xia" to your PC/ ISaGRAF before you can program it by ISaGRAF. The "i_8093w.xia" can be downloaded from <http://www.icpdas.com/en/faq/index.php?kind=280#751> > FAQ-112 or [Download FAQ-112 Demo](#)

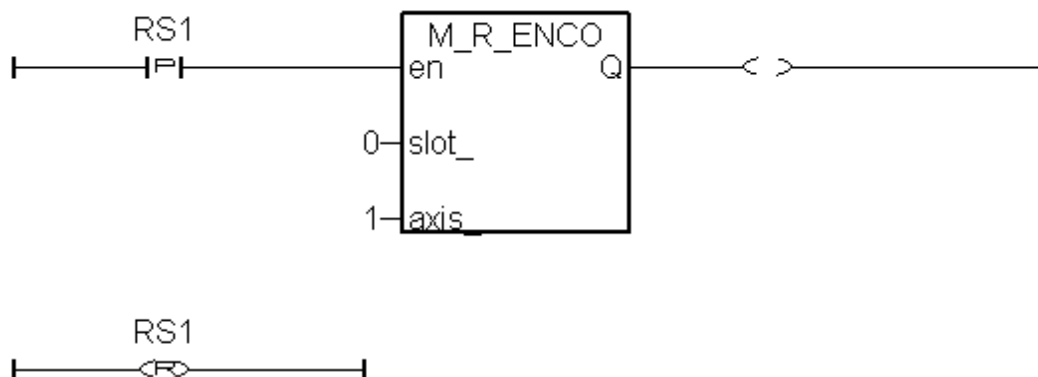


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To program the “I-8093W”, connect the “i_8093w” in the associate slot number as below. The following figure shows the “I-8093W” is plugged in slot 0. All Encoder input modes (X, Y, Z) are set as mode 2 (pulse/ direction). ISaGRAF variables V1, V2 and V3 must be declared as Integer/ input. All optional modes are 1 (cw/ ccw), 2 (pulse/direction) and 3 (A/B phase or Quadrant). The “z_index” is to get the Z-index D/I of the X, Y and Z axis, please declare them as Boolean/ input.



The Encoder value of the I-8093W is a 32-bit signed integer value ranging from -2,147,483,648 to + 2,147,483,647. To reset the Encoder value to 0 at any time, user may add a similar Ladder code as below.



The above code is to reset the X-axis Encoder value of slot 0's I-8093W (or I-8090W) to 0. When the “RS1” is rising to True, the associate Encoder value will become 0 in the beginning of the next PLC scan cycle. (Definition of “axis_”, 1: X-axis, 2: Y-axis, 3: Z-axis)