How to use The ISaGRAF PAC plus i-87113DW - the master card of the Carlson Strain Guage Inputs ?

The following ISaGRAF PACs can support the i-87113DW (the master card of Carlson Strain Guage Inputs) plus the DN-1618U-Test1 (daughter board) . Please make sure if your ISaGRAF PAC has the correct ISaGRAF driver installed.

	ISaGRAF driver version	I/O Slot number supported
XP-8xx7-CE6	Version 1.03 or later	1 ~ 7, max 7 i-87113DW (the leftmost is slot-1)
WinPAC-8xx7	Version 1.23 or later	0 ~ 7, max 8 i-87113DW (the leftmost is slot-0)
VP-25W7/23W7	Version 1.14 or later	0 ~ 2, max 3 i-87113DW (the leftmost is slot-0)

Each i-87113DW can connect max. four DN-1618U-Test1 daughter boards. Each DN-1618U-Test1 can connect max. 8 channels of Carlson Strain Guage Inputs. So each i-87113DW can measure max. 8 x 4 = 32 channels.)

The new released ISaGRAF driver :
http://www.icpdas.com/en/download/show.php?num=368&nation=US&kind1=&model=&kw=isagraf
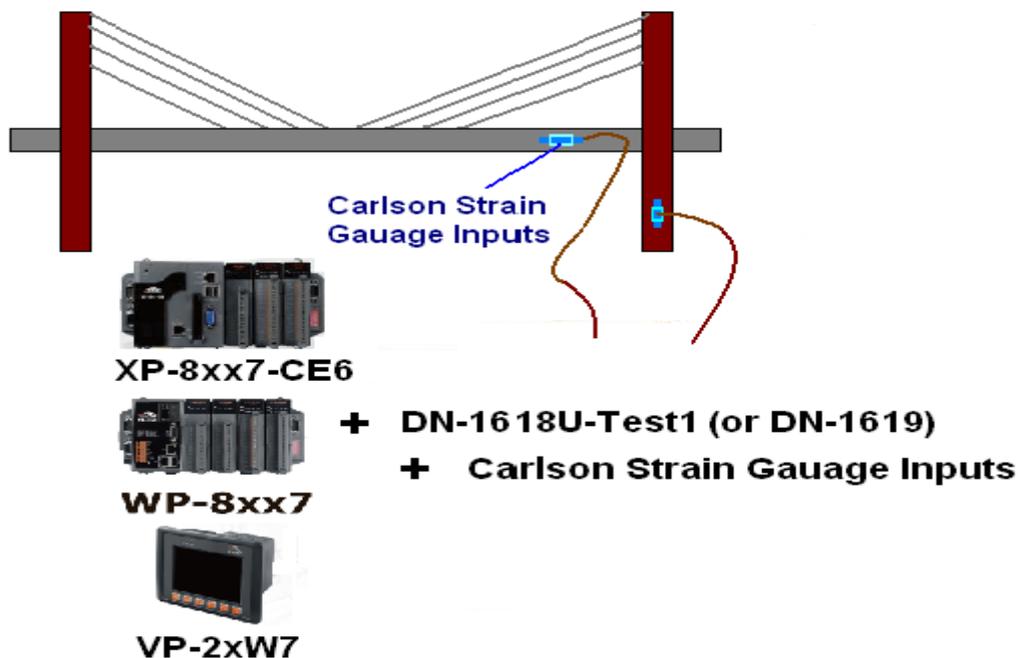
This figure is only for introduction. The dimension and configuration should depend on the real application.

Every DN-1618U-Test1 has one 8-bit dip-switch to set its NET-ID. If only one DN-1618U-Test1 connected by the i-87113DW , please set its NET-ID to 1 (turn its Dip 1 to "ON" position).   If two connected, please set the first one as 1 , the other DN-1618U-Test1 should set as 2. (turn its Dip 2 to "ON") . If three connected,   please set the first one as 1 , the second one as 2, the last DN-1618U-Test1 as 3 (turn its Dip 1   and 2 to "ON")   .   If there is four DN-1618U-Test1 connected, please set the first one as 1, the second one as 2, the third one as 3 and the last DN-1618U-Test1 as 4 (turn its Dip 3 to "ON" position)   .

Write program to use i-87113DW

Please make sure if the "i_87113d" -   I/O complex equipment has been installed into the ISaGRAF workbench. The file name is "i_87113d.xia" (visit
https://www.icpdas.com/en/faq/index.php?kind=280#751 > 128).
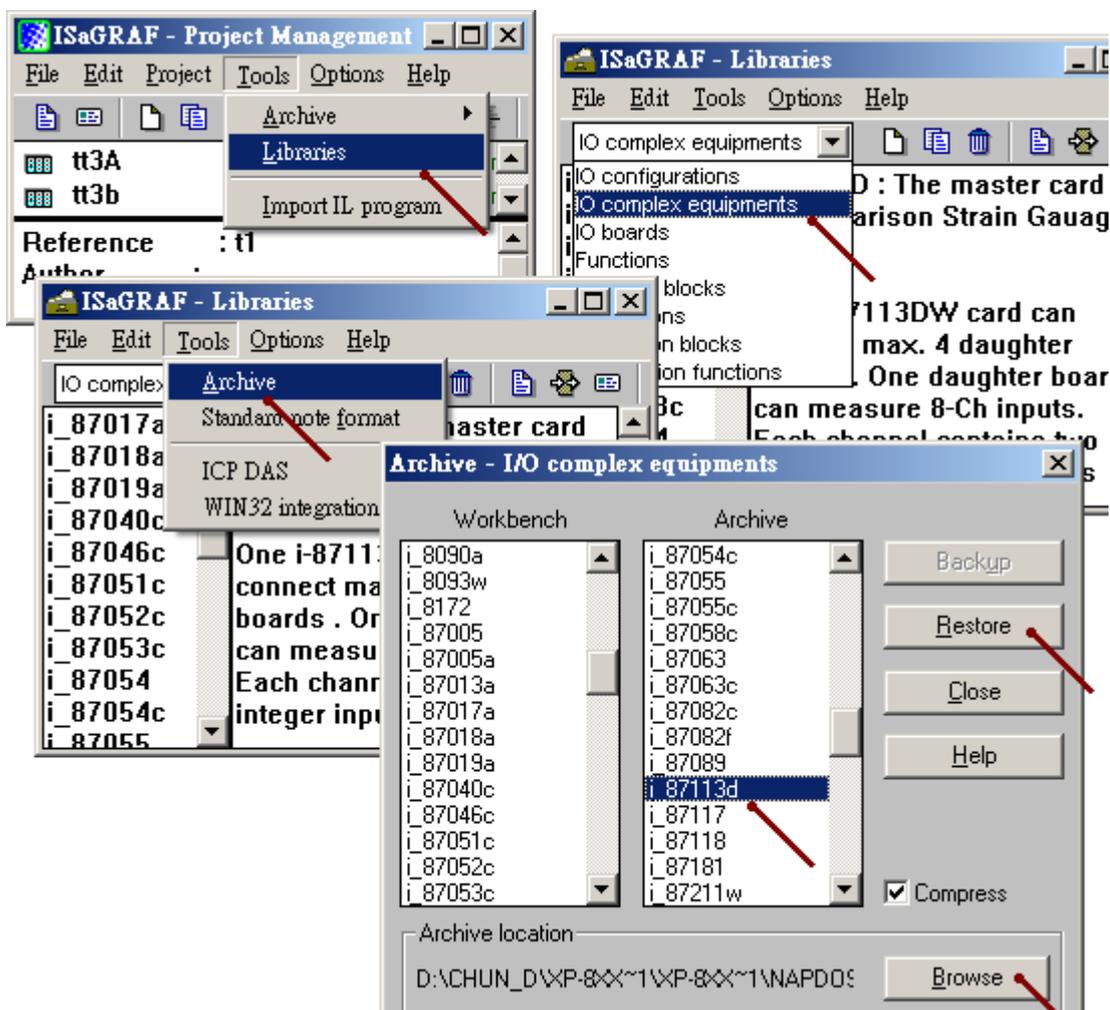
To program the i-87113DW, please connect the "i_87113d" in the associated slot No. , then set its proper parameters for all connected channels.

Sample_rate : Unit is ms (0.001 sec). Value can be 2000 ~ 600000. It means the scan time-interval of channel to channel.

daughter_num:The amount of DN1618U-Test1 boards connected. value can be 1 ~ 4.

Chx_range: Can be 2A, 20 or 2B

2A: (R1+R2) < 3200 ohm

20: (R1+R2) < 350 ohm

2B: (R1+R2) < 200 ohm

rest_tim : 1-Ch. Integer output to dynamically change the "rest_time". Unit is second. Can be 0 ~ 36000. It means the time to rest after one scan cycle (one cycle will scan all channels connected by the in i-87113DW).

* Ecah channel of the i-87113DW has 5 input-pins as listed in the next page.
* Each channel of the i-87113DW has two integer values which are stored as long interger format. If user want to define the modbus network address to these ISaGRAF variables, please define them to occupy 2 modbus number. Please refer to section 4.2 of the "User's manual of the ISaGRAF PAC")
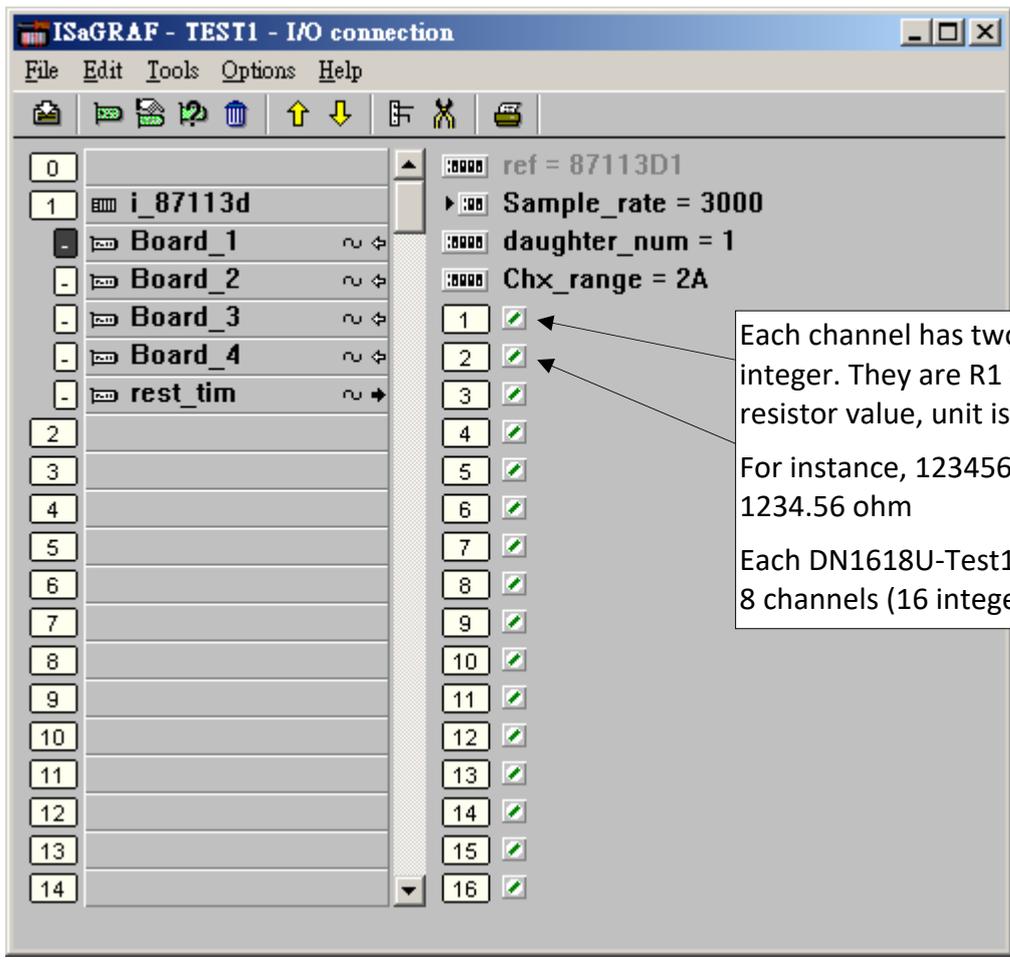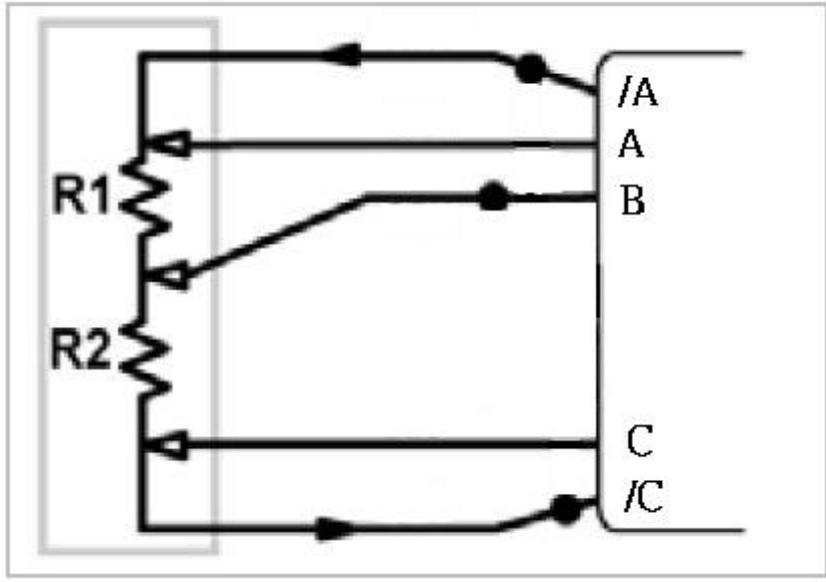
Each channel has two long integer. They are R1 and R2 resistor value, unit is 0.01 ohm .

For instance, 123456 means 1234.56 ohm

Each DN1618U-Test1 can connect 8 channels (16 integers)