Why the W-8xx7 or I-8xx7 or I-7188EG or I-7188XG always reset? How to fix it?

If your Wincon-8xx7 or I-8xx7 or I-7188EG or I-7188XG Controller always reset itself after downloading a new modified ISaGRAF program, it is not possible to “STOP” and Download a new program to replace this no-working one by ISaGRAF workbench.

The possible reason are listed as following.

1. User ISaGRAF program incorrectly connect the real I/O board to a non-exist Slot No. in ISaGRAF IO connection windows. For example, connect the I-87017 at Slot-8 or larger Slot No. I-8xx7 only supports real I/O board to connect at Slot 0 through 7 in the IO connection windows. While Wincon-8xx7 supports only real I/O board to connect at Slot 1 through 7 (Wincon doesn't have Slot 0)

2. The PLC scan time of the user ISaGRAF program is too long to occur the controller Watchdog timed-out. I-8xx7 and I-7188EG/ XG default are delivered with Watchdog enabled, while W-8xx7 default is disabled. If the PLC scan time of I-8xx7, 7188EG/ XG's ISaGRAF program is longer than 0.8 second, the Watchdog will reset the controller.

   Reasons to cause longer PLC Scan time are listed as below.
   A. I-8xx7 and I-7188EG/XG's CPU is 40M Hz. If the program do lots of floating point calculation. It will take longer the PLC scan time. (For I-8437-80/ I-8837-80 and W-8xx7, doing floating point calculation are much faster.)

   B. ISaGRAF program is very complicated and large.

   C. ISaGRAF program has run into “For” loops or “while” loops and stay inside it too long (exceed the Watchdog timeout value).

   D. If the W-8xx7 has enabled the Watchdog by the “Wdt_en” function and does lots of Read/ Write file operation function calls in the “\CompactFlash\” directory, the watchdog may reset if it takes too long time. And also if it does lots of Read/ Write EEPROM operation, the watchdog timeout may happens also.

3. If the COM3 of I-8xx7 has been set as Modbus RTU slave port and ISaGRAF program also use COM3 for other functions, for example – enable COM3 as bus7000 port or mbus: Modbus Master Port, or using COMXXX functions to Open, Read or Write COM3... then the controller may reset itself. Please refer to the section 1.3.6 in the “ISaGRAF user's manual”. Using “SEL 1” - “BAu -” to disable the COM3: Modbus RTU port setting.

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The complete ISaGRAF user's manual resides at
https://www.icpdas.com/en/download/show.php?num=333&nation=US&kind1=&model=&kw=isagraf

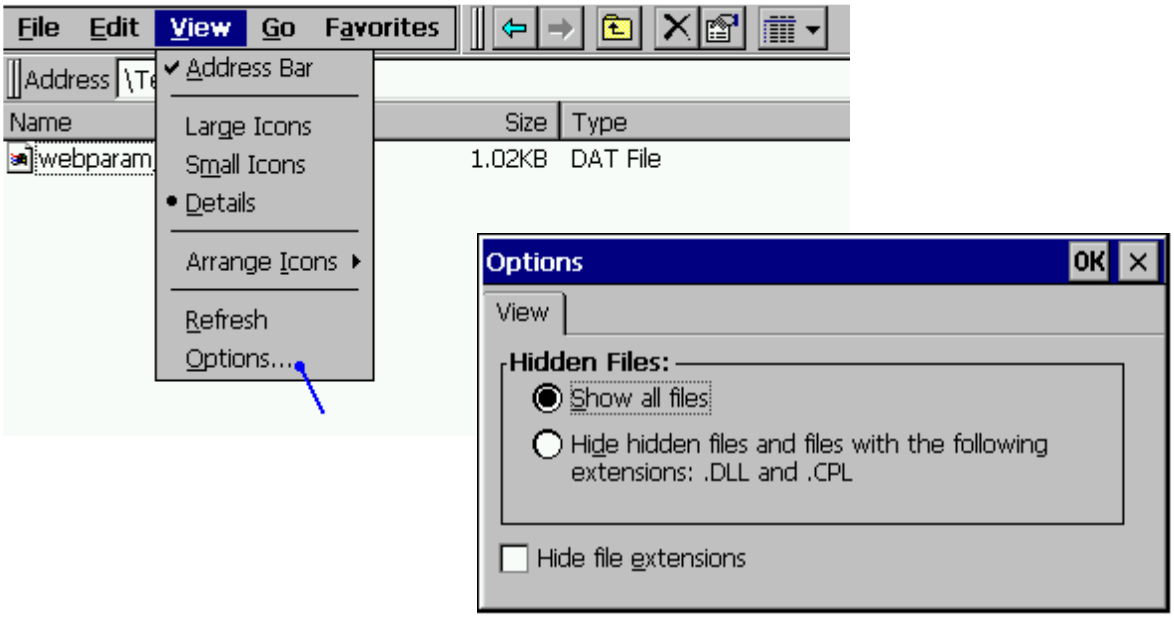
4. Use Variable Array and use the array index which exceeds the declared index number. For example declare VAL as VAL [0...9], however using VAL [10] or VAL[100] in the program.

If the Controller always reset, please follow below steps to delete the incorrect ISaGRAF program.

Delete Wincon-8xx7's ISaGRAF program

1. Please power off Wincon-8xx7 first. Then plug out the Compact Flash card from the CPU front panel. Then power up the Wincon again. Then Wincon should boot-up normally (because it is not running the incorrect ISaGRAF program now)

2. Plug in the Compact Flash card back to the same position while Wincon is still power-up. Wait about 10 seconds. Then run file explorer - "View" – "Options" and check the "Show all files". Then delete the \CompactFlash\ISaGRAF\ "**ISA11"** file.



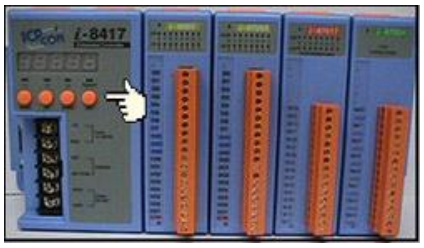
3. Re-cycle the Wincon-8xx7 once. Then ISaGRAF driver should run again with "No application"

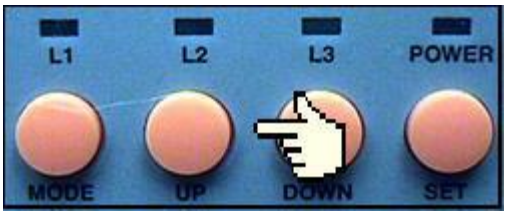
4. Modify your ISaGRAF code, re-compile it, then download and test it again.

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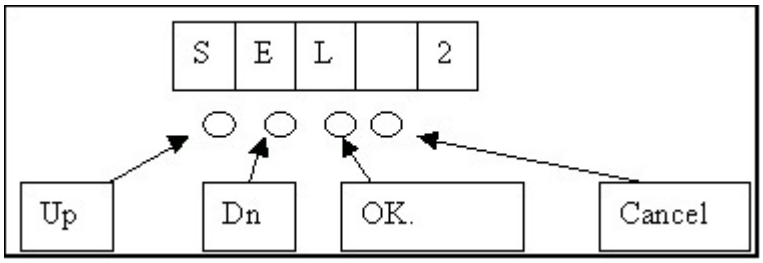
Delete I-8xx7's ISaGRAF program

First press in and hold in the **first two buttons** on the front panel of the controller and then power back up the I-8417/8817/8437/8837 controller to gain the ability to change the parameters.

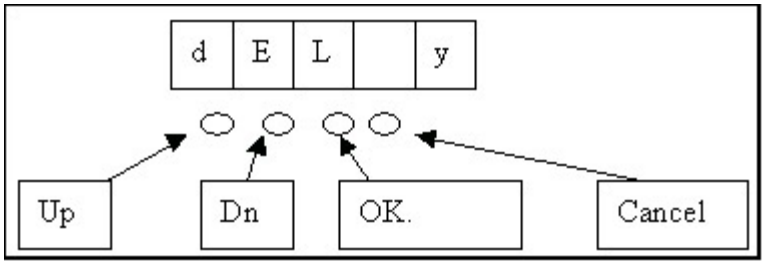




When the first display appear, press the "Up" or "Down" button until "SEL 2" (Select 2) appears in the LED readout.



Press the "Up" or "Down" buttons until "dEL" appears in the LED read out.



Press the "Up" or "Down" buttons until "y" appears in the LED readout then press the "OK" button. This will delete the currently installed ISaGRAF project from the controller system. After that press some "Cancel" to exit the hardware setting.

Delete I-7188EG or I-7188XG's ISaGRAF program

Steps to Delete an ISaGRAF Project From Controller:

1. Create a file folder named "7188" in your hard drive. For example, "c:\7188".

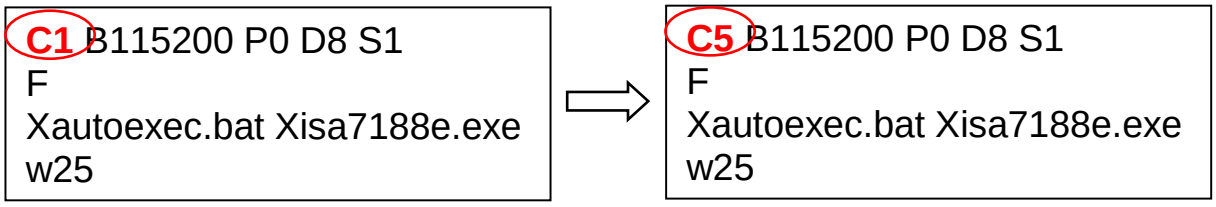
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2. Copy 7188xw.exe, 7188xw.ini, 7188x, 7188x.ini from https://www.icpdas.com/en/download/show.php?num=368&nation=US&kind1=&model=&kw=ISaGRAF into your "7188" folder.

3. Run "\7188\7188xw.exe" (For Windows NT, Windows 2000 & Windows XP) Run "\7188\7188x.exe" (For DOS, Windows 95 & Windows 98)

4. Link from COM1 of your PC to COM1 of the I-7188EG/XG through a RS-232 cable.
If your computer has no COM1/COM2 or you use other COM (like COM5) to link the I-7188, you can change the “C number” in the first line of “7188xw.ini” file.

EX: Using computer’s COM5 to link to I-7188



5. Power off the I-7188EG/XG, connect pin “INIT*" to "GND", then power it up.

6. If the connection is OK, messages will appear on the 7188xw screen.

7. Give command to delete ISaGRAF program

For I-7188XG: to delete project type "isa7188 *d="
Ex1: 7188> isa7188 *d=

For I-7188EG: to delete project type "isa7188e *d="
Ex2: 7188> isa7188e *d=

For uPAC-7186EG: to delete project type "isa7186e *d="
Ex3: 7188> isa7186e *d=

8. Remove the connection between “INIT*” and “GND".

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