

Why the W-8xx7 or WinPAC-8xx7 or i-8xx7 or i-7188EG/XG or uPAC-7186EG or iPAC-8xx7 always reset or hang off ? How to delete the ISaGRAF application ?

by chun@icpdas.com

If your Wincon-8xx7 or WinPAC-8xx7 or i-8xx7 or i-7188EG or i-7188XG or uPAC-7186EG or iPAC-8xx7 controller always reset itself (or hang off) 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 the 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 the IsaGRAF IO connection windows. For example, connect the i-87017 at Slot-8 or larger Slot No. The 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 big to make the controller Watchdog timeout happen . The i-8xx7 and i-7188EG / XG , uPAC-7186EG and iPAC-8xx7 default are delivered with Watchdog enabled, while W-8xx7 and WinPAC-8xx7 default is disabled. If the PLC scan time of the i-8xx7, 7188EG / XG , uPAC-7186EG and iPAC-8xx7 's ISaGRAF program is longer than 0.8 second, the Watchdog will reset the controller. Usual reasons to make large PLC Scan time are listed as below.
 - A. i-8xx7 and i-7188EG/XG 's CPU is 40M Hz. If the program does lots of floating point calculation. It will make the PLC scan time big. (For i-8437-80 / i-8837-80 , uPAC-7186EG , iPAC-8xx7, W-8xx7 and WinPAC-8xx7, doing floating point calculation are much faster.)
 - B. The ISaGRAF program is very complicated and large.
 - C. The 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 or iPAC-8xx7 has been set as Modbus RTU slave port and the 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.

The complete ISaGRAF user's manual resides at

CD-ROM:\napdos\isagraf\8000\englishe_manu\ “user_manual_i_8xx7.pdf” or

CD-ROM:\napdos\isagraf\wincon\english_manu\ “user_manual_i_8xx7.pdf”

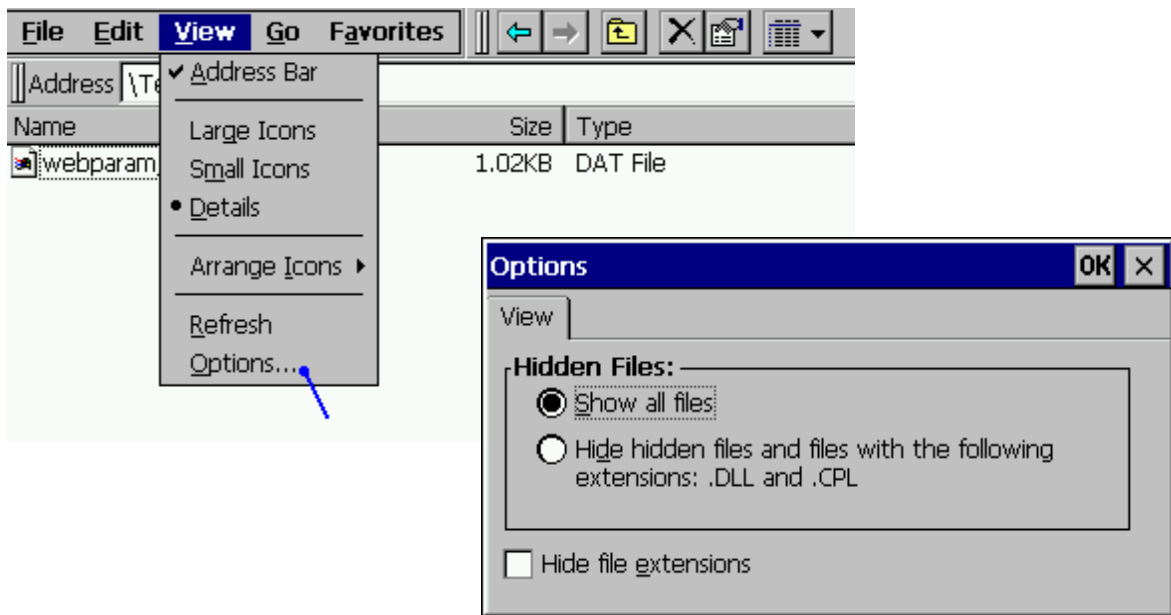
or http://www.icpdas.com/products/PAC/i-8000/getting_started_manual.htm

4. Use Variable Array and use the array index which exceeds the declared index number. For ex, 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.



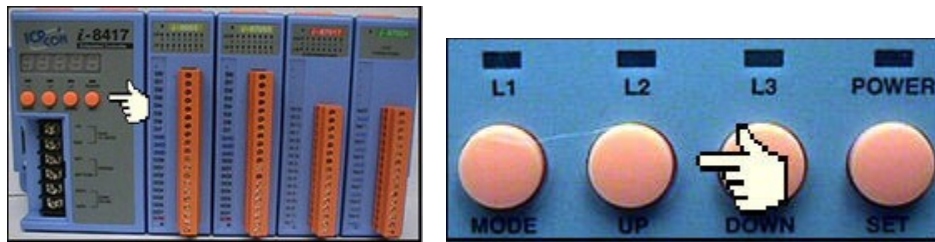
3. Re-cycle the Wincon-8xx7 once. Then ISaGRAF driver should run again with “No application”
4. Modify your ISaGRAF code, re-compile it, then download and test it again.

Delete WinPAC-8xx7 's ISaGRAF program

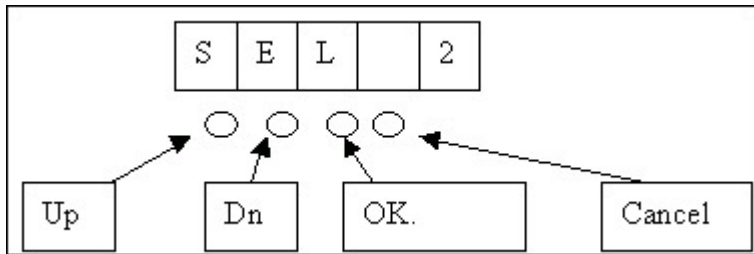
1. Please turn the rotary switch to position 1 (Safe mode) on the front panel of the WinPAC-8xx7 . Then reset the WinPAC-8x47 once.
2. Then the WinPAC-8xx7 will boot up as safe mode. There will be one pop-up window asking “ ... reboot right now ...” , please answer “No”. Then get into the “My Device” on the WinCE desktop. Please goto the “System_Disk\isagraf\” directory . Then delete the “ISA11” . The “ISA11” is the ISaGRAF current running application. (If you find no “ISA11” in the System_Disk\isagraf\ directory, please goto Explorer > View > Options to modify the setting)
3. Turn the rotary switch to position 0 (normal), then reboot WinPAC-8xx7. Then when ISaGRAF is connected, it will display “No Application” .

Delete i-8xx7 or iPAC-8xx7 's ISaGRAF program

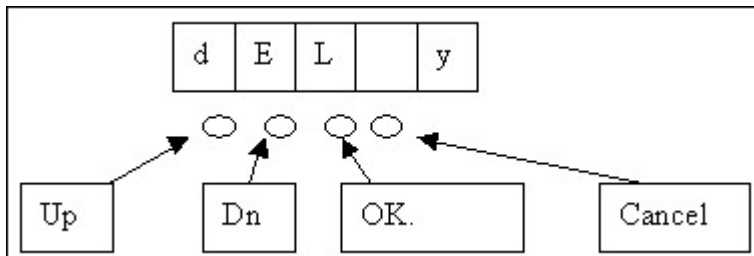
First press in and hold in the **first two buttons** on the front panel of the controller and then power back up the I-8417/8817/8437/8837 controller to gain the ability to change the parameters.



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.



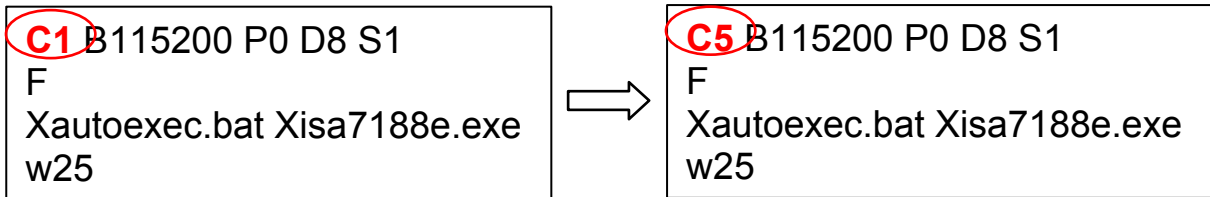
Press the "Up" or "Down" buttons until "y" appears in the LED readout then press the "OK" button. This will delete the currently installed ISaGRAF project from the controller system. After that press some “Cancel” to exit the hardware setting.

Delete i-7188EG or i-7188XG or uPAC-7186EG '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".
2. Copy \Napdos\ISaGRAF\7188EG\Driver\7188xw.exe, 7188xw.ini, 7188x, 7188x.ini from the CD_ROM 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 by a RS232 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 the 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" .