

I-8120W

Quick Start User Guide

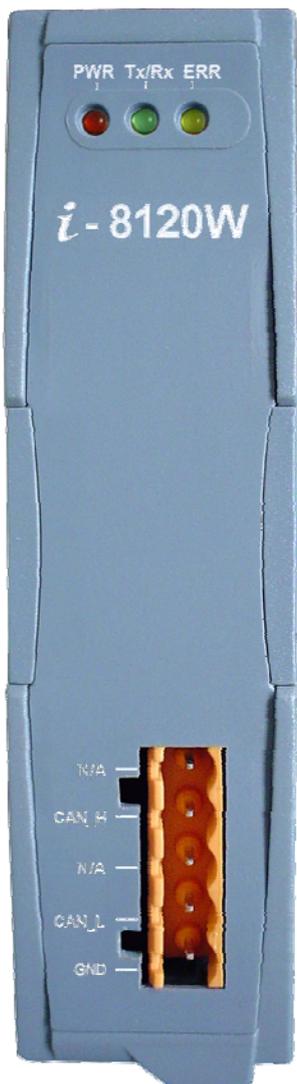
1. Introduction

This user guide introduces users to apply the I-8120W in their application quickly. Therefore, if users want to know the details, please refer to the user manual of I-8120W. You can find it in the CD or the website.

CD path: [CAN/SlotModule/I_8120W/Documents](#)

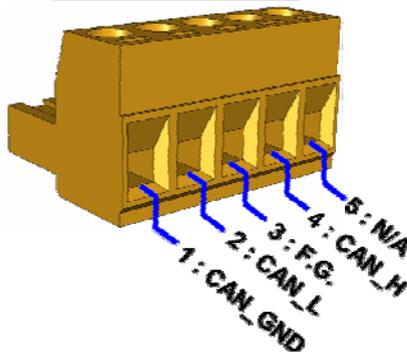
Website: http://www.icpdas.com/products/Remote_IO/can_bus/i-8120w.htm

2. Hardware structure

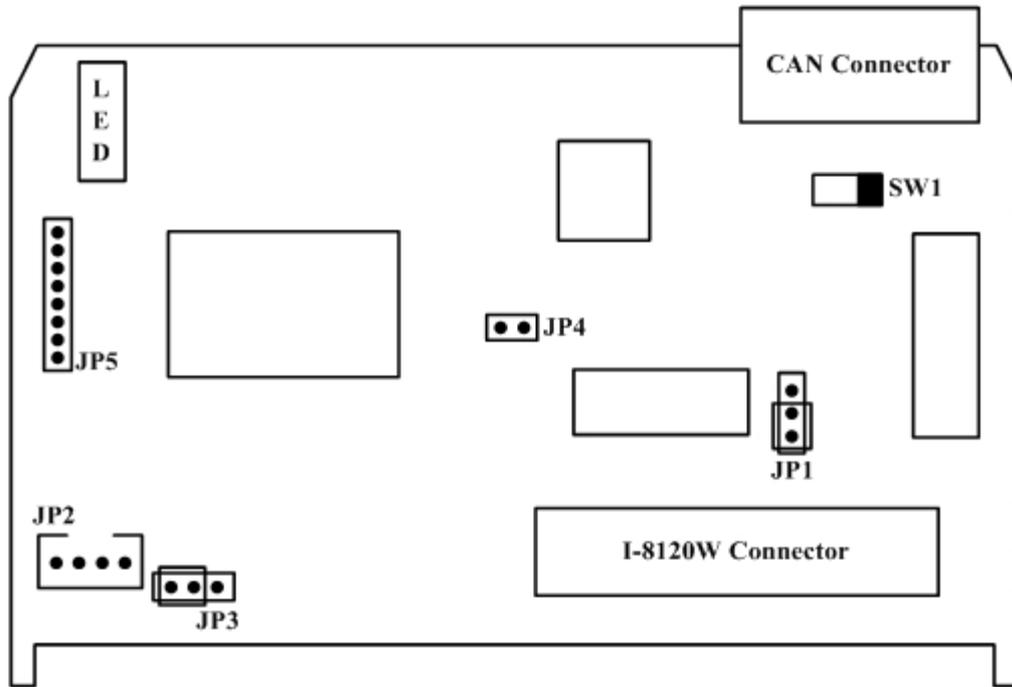


Mode	LED	Description
Default Firmware	PWR	Turn ON when power on
	Tx/Rx	Flash once when getting/sending a CAN message
	Err	Turn ON for finding an error. Flash for transmitting fail.
User-defined Firmware	PWR	Turn ON when power on
	Tx/Rx	User-defined LED
	Err	
Download	PWR	Turn ON when power on
	Tx/Rx	Interlace flash once per second
	Err	

Female Connector



Pin No.	Signal	Description
1	GND	Ground
2	CAN_L	CAN_L bus line
3	N/A	Non-available
4	CAN_H	CAN_H bus line
5	N/A	Non-available



Jumper	Description	Status	
		Enable	Disable
SW1	120Ω terminator resistance of CAN port.	SW1 Enable	SW1 Disable
JP1	Lock mode for resisting the noise or disturbances. In this case, updating firmware is not allowed. Unlock mode for updating the firmware of I-8120W.	JP1 Lock	JP1 Unlock
JP2	Debug port for user-defined firmware. The I-8120W prints the debug messages or system information from this port. Connect this port to PC COM port. Use 7188xw.exe to show the messages. The baud rate is 115200 bps. You can find the 7188xw.exe in the CD. The path is CAN/SlotModule/I 8120W/Tools/PC		
JP4	Reset mode for forcing the I-8120W into download mode. Wiring this jumper until Tx/Rx LED and Err LED are always ON. Then, remove the wire.	JP4 Reset	JP4 Normal

3. How to Start

Step1: Set the SW1 of the I-8120W to the proper position. Generally, the both end of CAN bus (line topology) needs 2 terminator resistance. Each of them is 120Ω.

Step2: Unlock the JP1. Generally, unlock the JP1 during developing the application.

When running the application in practice, locking the JP2 is helpful to resist the noise and disturbances.

Step3: Connect the JP2 with PC COM port.

Step4: Set the JP4 to normal.

Step5: Plug the I-8120W in your PAC. Here, use WinPAC for the demonstration. Connect the CAN port of the I-8120W with the CAN network. Connect the peripherals (such as monitor, Keyboard, mouse, and Ethernet) with the WinPAC. Then, turn on the WinPAC.

Step6: Download the I8120W_Utility.exe and the I-8120.dll into the same folder on the WinPAC. You can use ftp or USB disk to do this. (Before using the ftp, you must configure the ftp parameters of WinPAC by using WinPAC Utility. You can find the shortcut  on the desktop of WinPAC.) Please refer to the WinPAC user manual.

CD path of the utility tool: [CAN/SlotModule/ I 8120W/Tools/WinPAC](#)

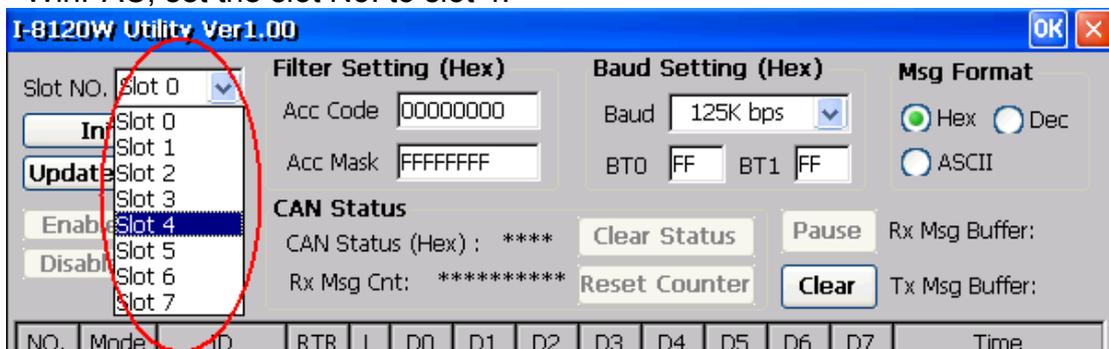
CD path of the I8120.dll: [CAN/SlotModule/ I 8120W/Demos/WinPAC Library/](#)

User manual of WinPAC:

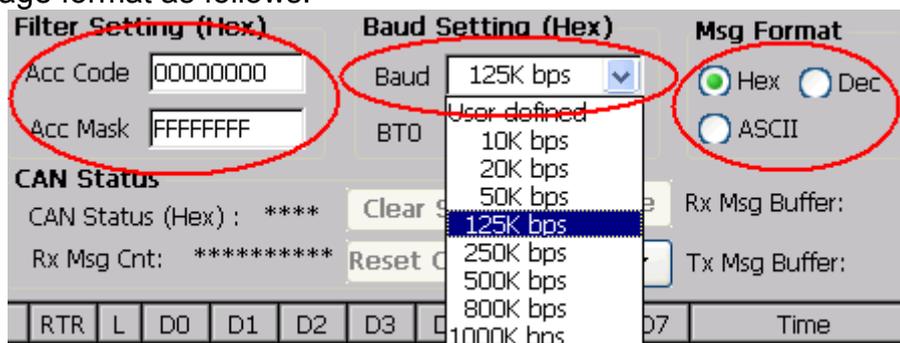
http://www.icpdas.com/products/PAC/winpac/download/winpac_8000/download_documents.htm

For Default Firmware:

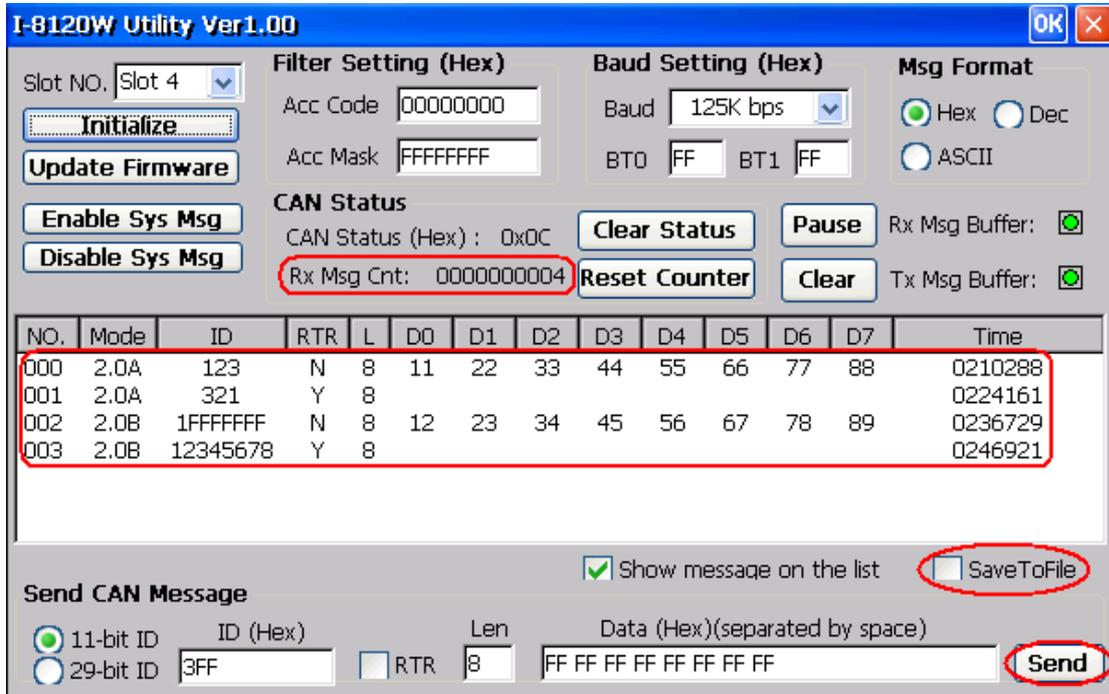
Step7: Run the I8120W_Utility.exe. Assume the I-8120W is plugged in slot 4 of the WinPAC, set the slot No. to slot 4.



Step8: Assume the baud of the CAN network is 125 kbps. Set the filter, baud, and message format as follows:

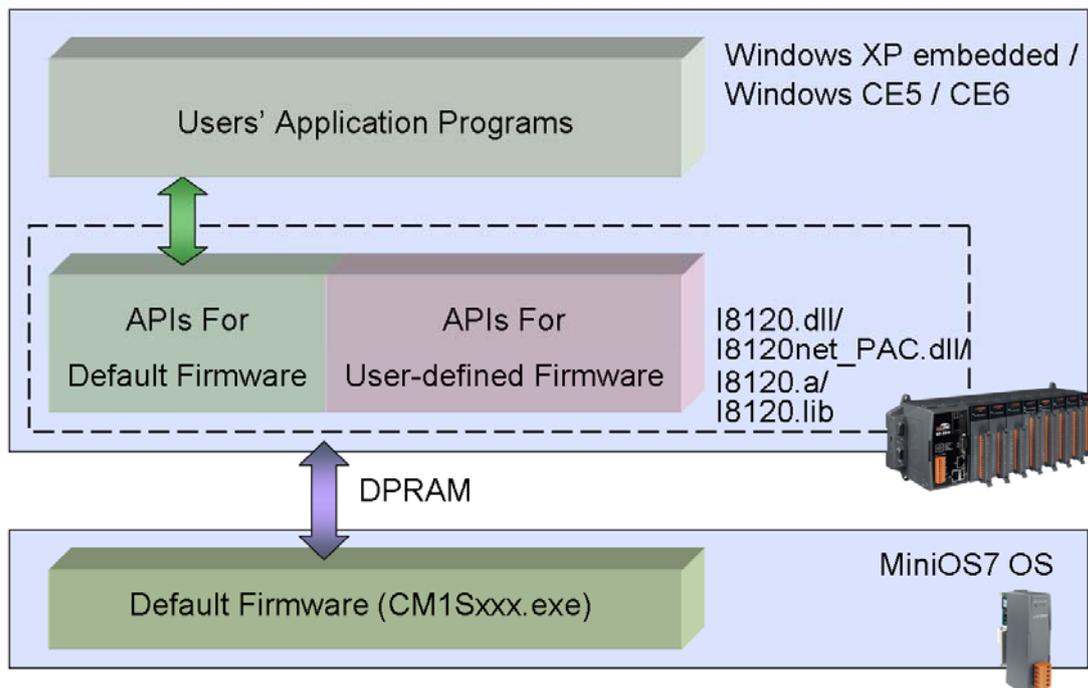


Step9: The receiving messages will be shown on the list, and users can use the button "Send" to send a CAN message. Use "SaveToFile" to save the receptions. In this case, uncheck the "Show message on the list" to improve the efficiency of the WinPAC.



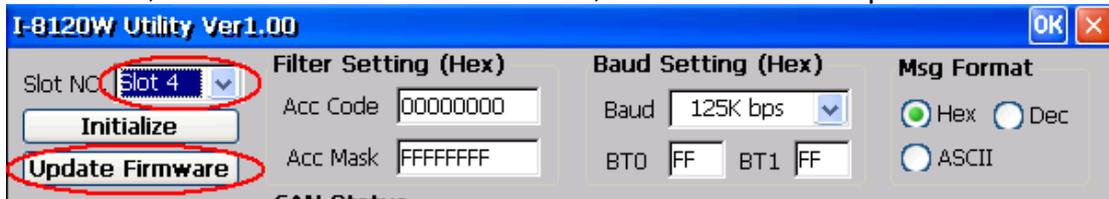
Step10: Users can download and run the demos for default firmware on the WinPAC. You can find them in the CD. The path is shown as follows:

[CAN/SlotModule/ I 8120W/Demos/For Default Firmware/WinPAC](#)



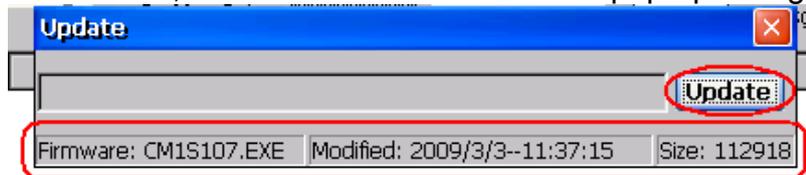
For Updating Firmware:

Step7: Run the I8120W_Utility.exe. Assume the I-8120W is plugged in slot 4 of the WinPAC, set the slot No. to slot 4. Then, click the button "Update Firmware".



Step8: Use ftp or USB disk to copy the newer firmware on to the WinPAC.

Step9: The pop-up dialog shows the information of current firmware. Click the button "Update". Afterwards, select the newer file from the pop-up dialog.



For User-defined Firmware:

Step7: Users need to build their application of the WinPAC and the firmware of I-8120W firstly. Use eVC++, WinPAC SDK, I8120.lib and I-8120.h to develop the WinPAC application. Use TC/BC/TC++/BC++, 186COMM.lib, and 186COMM.h to develop the firmware of I-8120W. You can find these file in the CD or website. The path is show as follows:

Website:

eVC++:

<http://www.microsoft.com/downloads/details.aspx?FamilyId=1DACDB3D-50D1-41B2-A107-FA75AE960856&displaylang=en>

WinPAC SDK:

http://www.icpdas.com/products/PAC/winpac/download/winpac_8000/download_sdk.htm

TC++ 1.01

<http://www.icpdas.com/download/download-list.htm>

CD path:

I-8120.lib and I-8120.h for eVC++:

[CAN/SlotModule/ I 8120W/Demos/WinPAC Library](#)

186COMM.lib and 186COMM.h for TC/BC/TC++/BC++:

[CAN/SlotModule/ I 8120W/Demos/For User Defined Firmware/Firm Lib](#)

Step8: When finishing the user-defined firmware of the I-8120W, download it into the WinPAC. Please refer the Step7 of the “For Updating Firmware”.

Step9: Run your WinPAC application. For more details about how to program the application and firmware, please refer to the user-defined demos and user manual for the details.

