



FASTFRAME-XB

FASTFRAME-XB
USER'S MANUAL

30002-00410

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OTHER ALACRON MANUALS

Alacron manuals cover all aspects of FastSeries hardware and software installation and operation. Call Alacron at 603-891-2750 and ask for the appropriate manuals from the list below if they did not come in your FastSeries shipment.

30002-00153	Fast I/O Hardware User's Manual
30002-00176	FastImage 1303 Hardware User's Manual
30002-00180	Fast4 1303 Hardware User's Manual
30002-00183	FastImage 1303 Camera Integration User's Manual
30002-00184	FastSeries Getting Started User's Manual
30002-00192	FastX Hardware User's Manual
30002-00193	FastXe Hardware User's Manual
30002-00390	FastFrame 1303 Hardware User's Manual
30002-00395	FastMotion User's Manual

SYSTEM REQUIREMENTS

General system requirements are:

- Windows XP, or Linux (2.4/2.6 kernel) operating system.
- Minimum 256MB PC memory installed.
- Acrobat Reader Software
- The operating temperature range of the FastFrame-XB Cardbus boards is 0° Celsius to 40° Celsius. There is an industrial grade card with - 10° Celsius to 70°
- A Express card slot with at least 1W (3.3V at 0.3 amps) of available power.

A computer which supports shared memory through the use of the /burnmemory boot option on Windows XP, or the IOMEM=XXXM boot command on Linux, is required to use the FastMotion program.

Some computers / laptops are designed to be compatible with the OEM versions of the various software and hardware elements provided by the manufacture, but the design has unexpected features which do not allow installation of the FF-XB or it's software. Should you have a problem making the FF-XB operate in your laptop please contact Alacron for assistance.

It is the responsibility of the installer of the FF-XB to determine if it is compatible with the computer or laptop.

A. Introduction of the FastFrame XB

Alacron's FastFrame-XB Express Card (FF-XB) product breaks new ground in PC cards. Alacron's FastFrame-Express Card is available with three factory configuration options: Analog, Digital LVDS, and Camera Link. These options can not be mixed due to space and signal limitations.

Shown below is a picture of the FF-XB . The left-hand connector is a 36 pin VHDCI input connector. The right-hand connector plugs into a PCMCIA slot which supports the Express Card standard. The Card-Bus is almost identical to 33 MHz PCI bus.

The input connector at the left is a 36-Pin VHDCI connector. This connector has been selected to provide for all the options supported by the FF-XB . Alacron provides cables to allow the connection to this connector.



Figure 5: FastFrame-XB 34 mm Card Bus Board



Figure 6: FastFrame-XB 54 mm Card Bus Board

A block diagram of the FF-XB is shown below. Depending on the option ordered the inputs could be Analog, Digital LVDS or Camera Link.

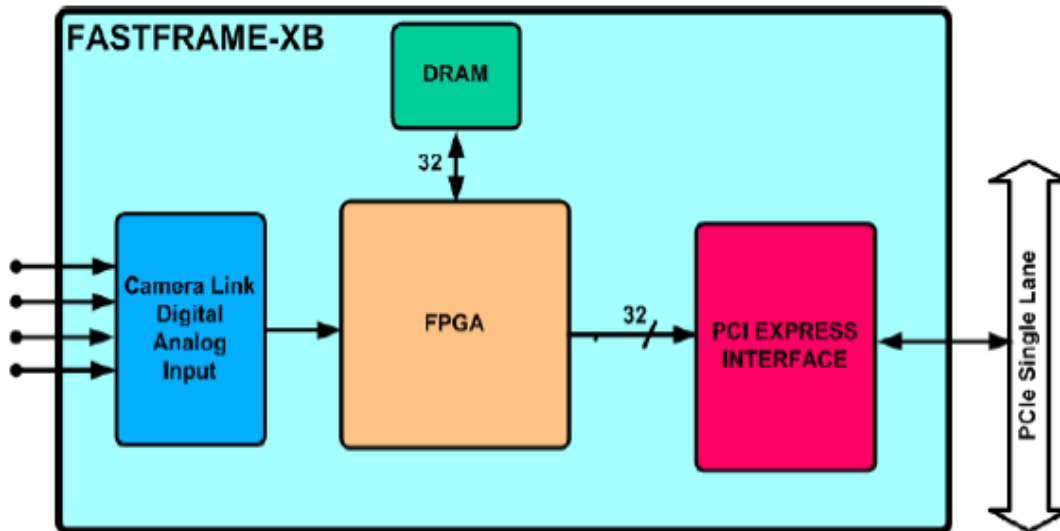


Figure 7: Express Card Block Diagram

B. FastFrame-XB Features

The Alacron FastFrame-XB Express Card bus is for original equipment manufacturers and end users who anticipate a demand for diverse I/O requirements and high bandwidth. Available in Analog, Digital LVDS and Camera Link configurations, the FastFrame-XB Express Card bus with the PEX 8311 provides for complex image and digital signal processing. Analog, Digital LVDS, and Camera link options are mutually exclusive, factory configured.

INSTALLATION PREVIEW FOR FASTMOTION-XB:

FastMotionXB Application is the Video Viewer for cameras attached to the Alacron Express Card frame grabber.

SOFTWARE AND DRIVER INSTALLATION:

WARNING: Do not install the FF-XB in your computer unless the software has already been installed.

FASTMOTION APPLICATION INSTALLATION:

WAIT! - Don't plug the FastFrameXB frame grabber into your PC until later.

Step1: Run the FastMotionXB installer (setup.exe) to completion.

Step2: Get instructions for installing the frame grabber at: StartMenu--> Programs--> Alacron--> FastFrameXB--> 106--> ReadMeDriver.

Step3: Install the frame grabber and driver following the instructions located in step 2.

Step4: Get instructions for running FastMotionXB at: StartMenu--> Programs--> Alacron--> FastFrameXB--> 106--> ReadMeFastMotion

INSTALLING THE FASTFRAME-XB (FF-XB) DRIVER:

This document tells you how to install the kernel driver for your Alacron FastFrameXB Express Card frame grabber. To do this, you must have previously installed the FastMotionXB application, by running Setup.exe on the Setup Disk.

FIRST TIME DRIVER INSTALLATION:

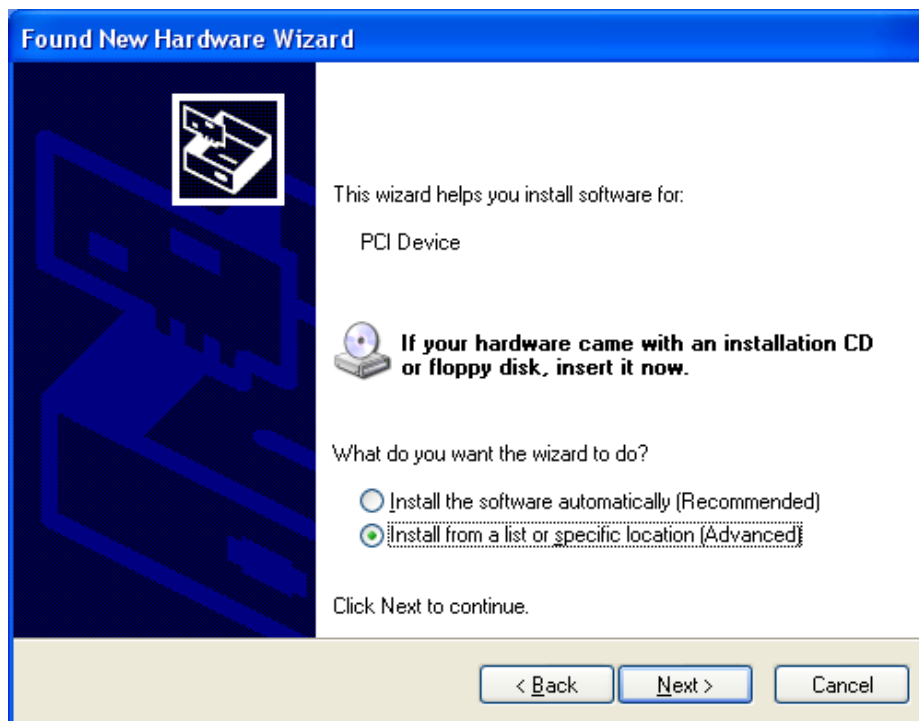
The sequence described here is intended for the initial installation of the FFXB driver. If you are updating an existing FFXB driver from an early version to a later version, use the procedure described in the section titled "**Driver Update Installation**", also contained in this document.

Step 1 – Plug the FFXB into the Express Card slot on your Windows Laptop.

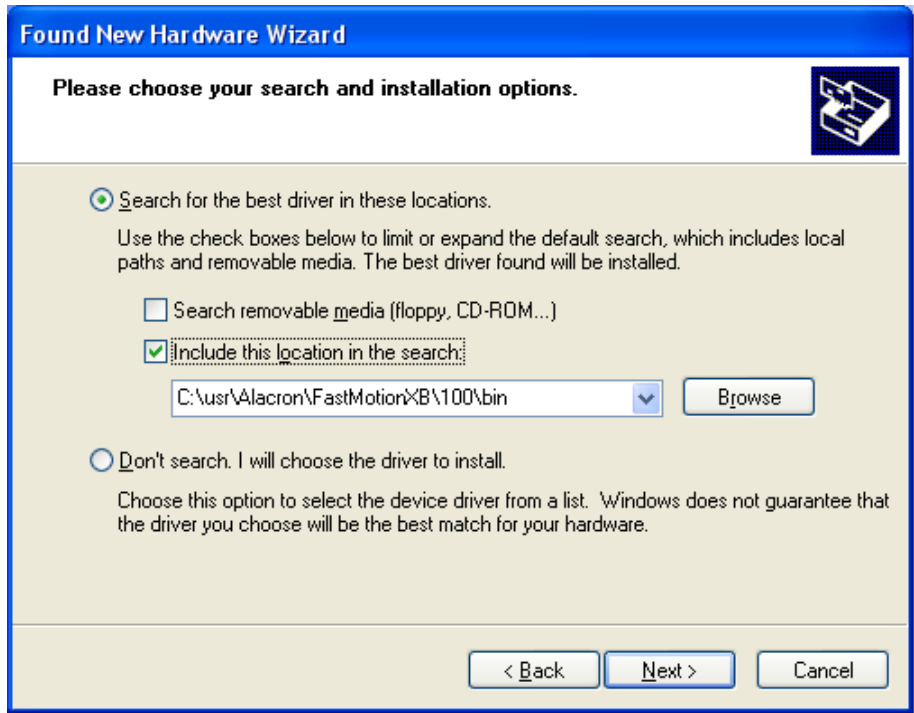
Step 2 – Windows will detect the new card and present the "Found New Hardware Wizard"



Step3 – Select the radio button labeled “No, not this time” and press “Next >”.

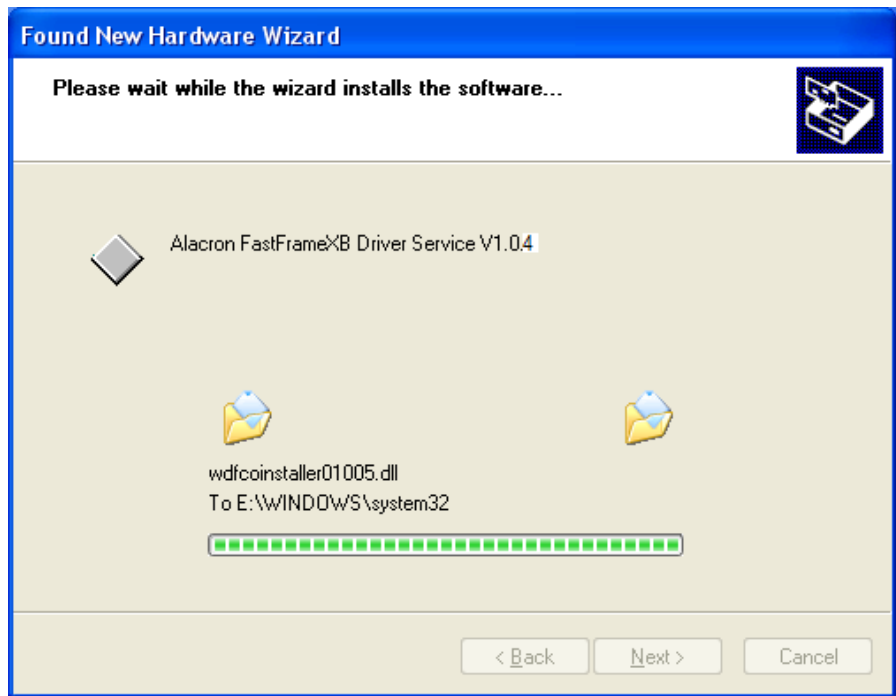


Step 4 – Select “Install from a list or specific location...” and press “Next >”.

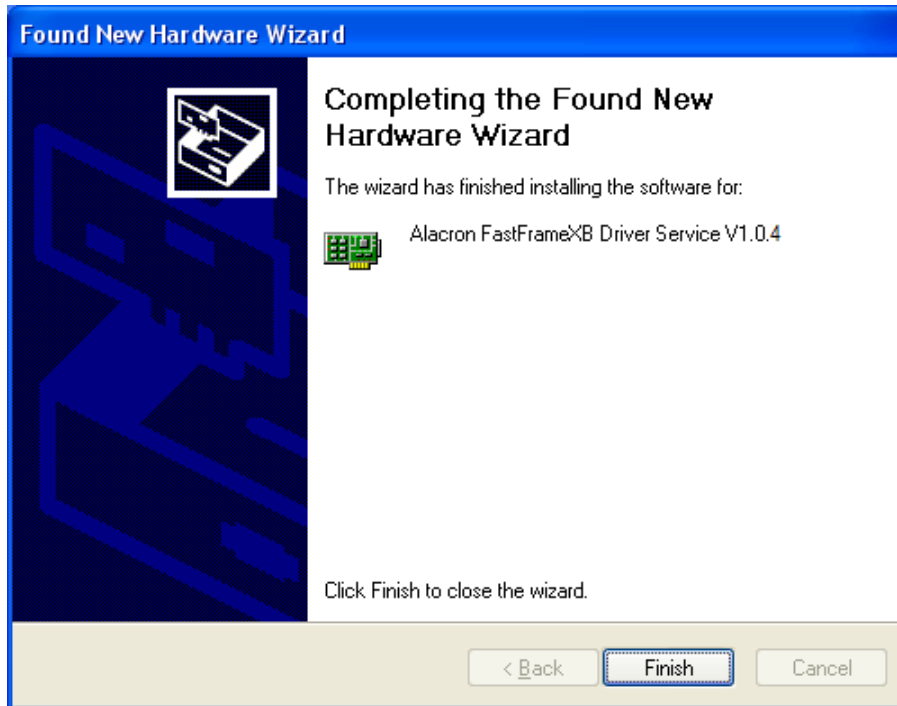


Step 5

- a) Select “Search for the best driver...”, b) Uncheck “Search removable media...”, c) Check “Include this location in the search:”, d) Type in, or browse to, the path to the “bin”, subdirectory where FastMotionXB was installed: e.g. default installation path is “C:\usr\Alacron\FastMotionXB\100\bin”, e) Press “Next >”



- Step 6 – Wait for the driver installer (seen above) to run to completion.



Step 7 – Press “Finish”. This completes the driver installation.

Step 8 – The FastFrameXB frame grabber and software are now ready to use. You can consult the “ReadMeFastMotion” document for guidance to connect the camera and run the FastMotionXB application.

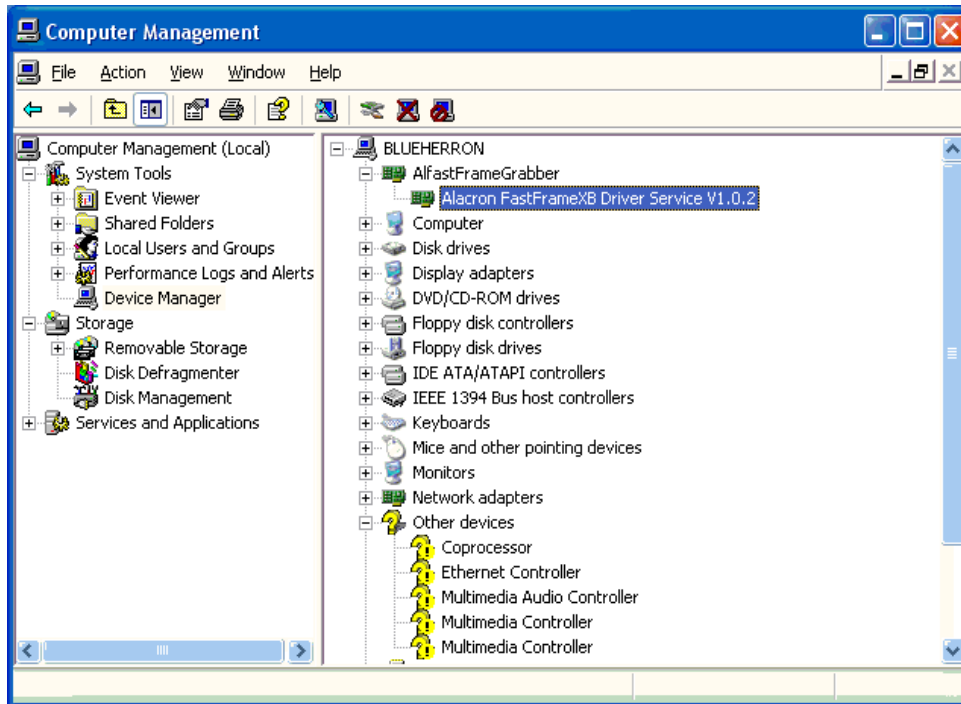
DRIVER UPDATE INSTALLATION:

The following procedure is intended for updating a previously installed FFXB driver with a newer version. It can also be used to reinstall the current driver from the original media, should that become necessary. This procedure assumes that you have already installed the new version of the FFXB application software (e.g. FastMotionXB), and now want to install the driver that came with it.

Step 1 – Plug the FFXB card into the Express Card slot, if it is not already in place.

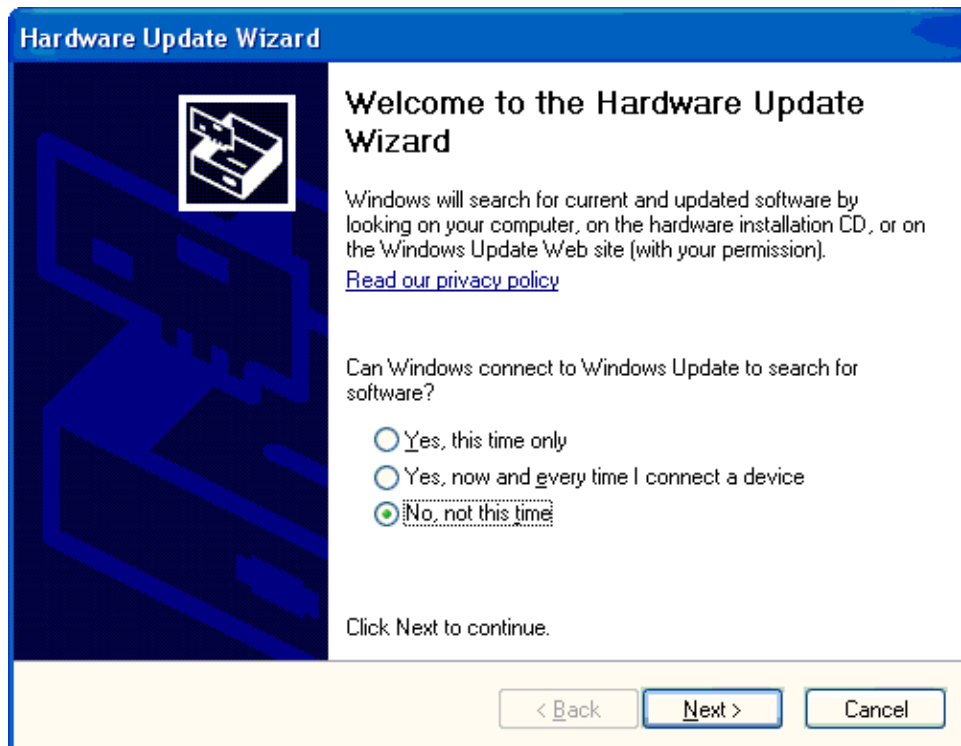
Step 2 – Right-Click on the ICON for “My Computer” on the Windows Desktop, and select “Manage”.

Step 3 – Now select “**Device Manager**” in the left-hand panel.

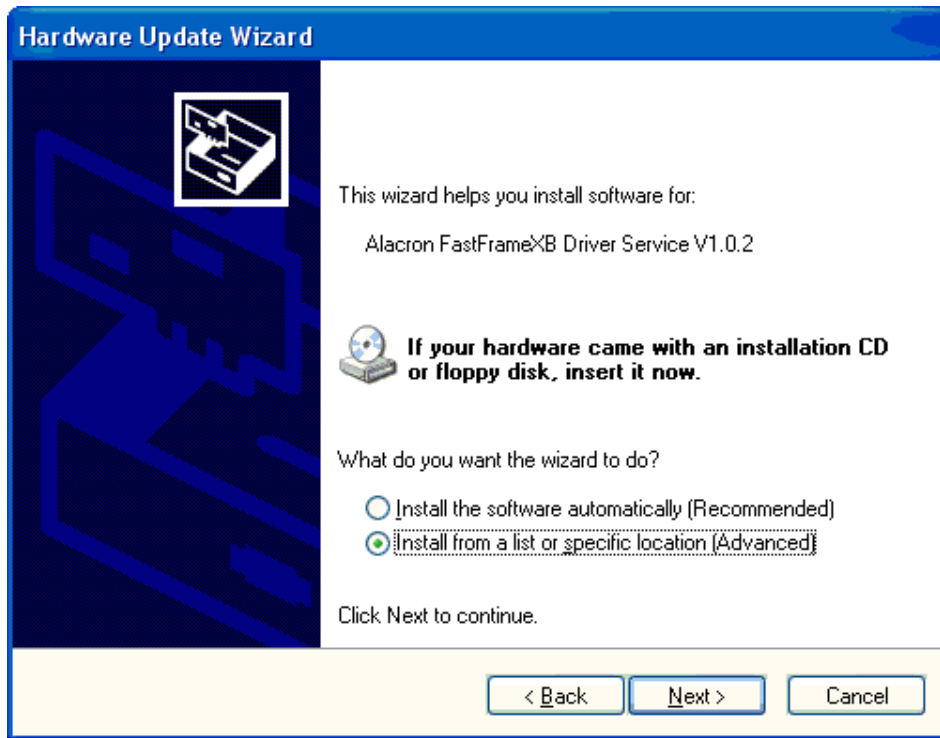


The right-hand panel should display the device class “AlfastFrameGrabber” and under that, it should show the currently installed driver for the FastFrameXB. If the current driver is not shown, you should unplug the FFXB card, wait 20 seconds, and then plug it in again. This should cause the current FFXB driver to appear as shown above.

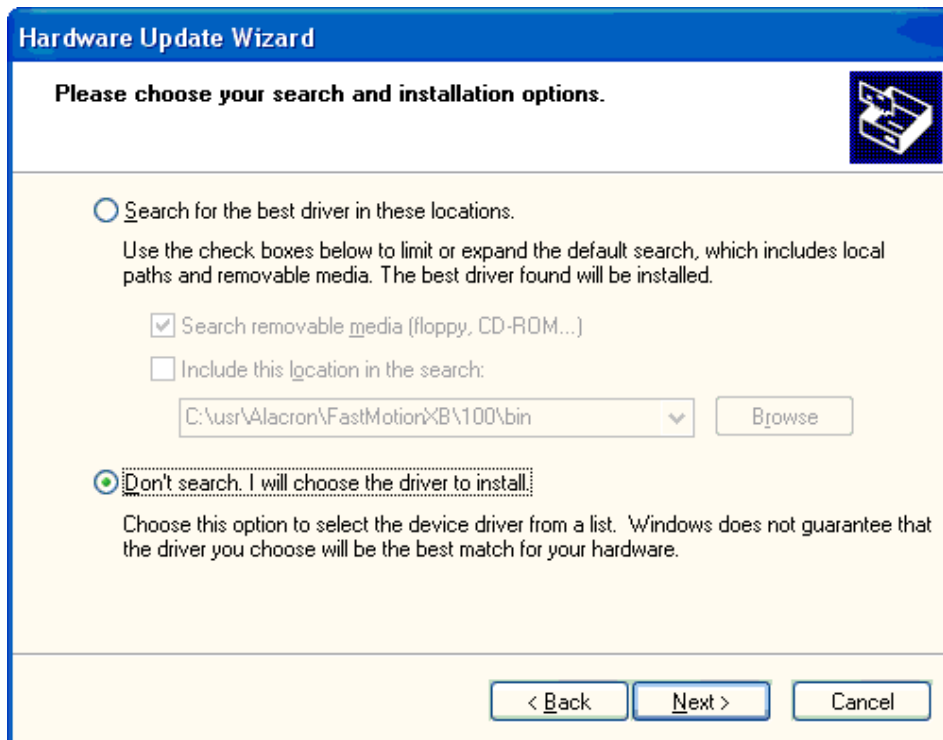
Step 4 – Right-click on the icon for “Alacron FastFrameXB Driver...” and select “Update Driver” to get the next screen:



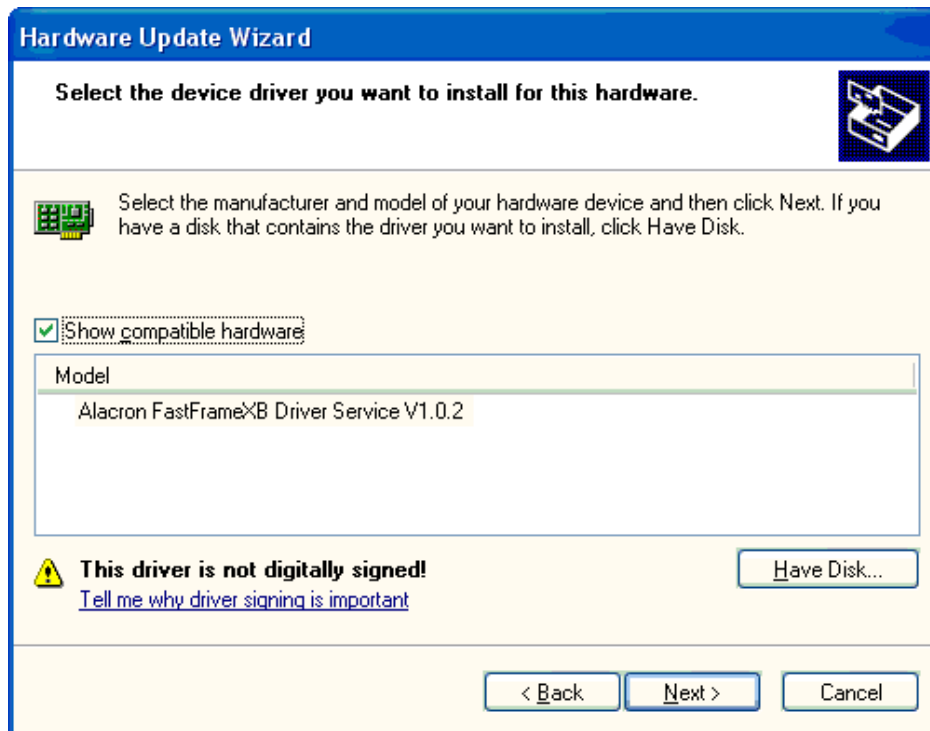
- Step 5 – Select the radio button titled “No, not this time”, and Press the **Next** button to get the next screen:



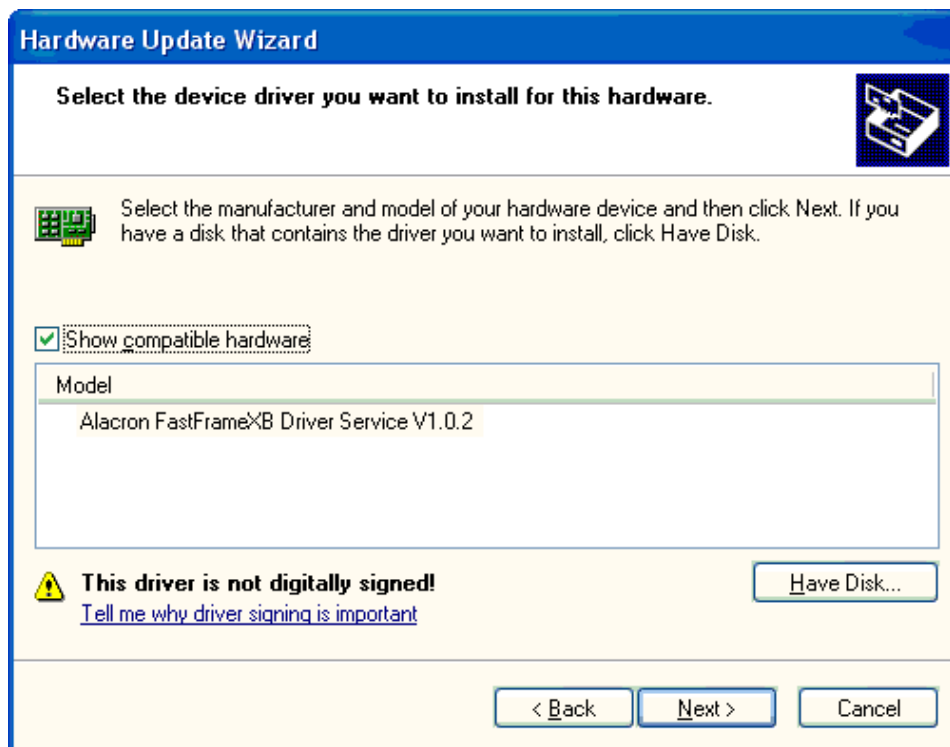
Step 6 – Select the radio button “**Install from a list or specific...**” and press the **Next** button.



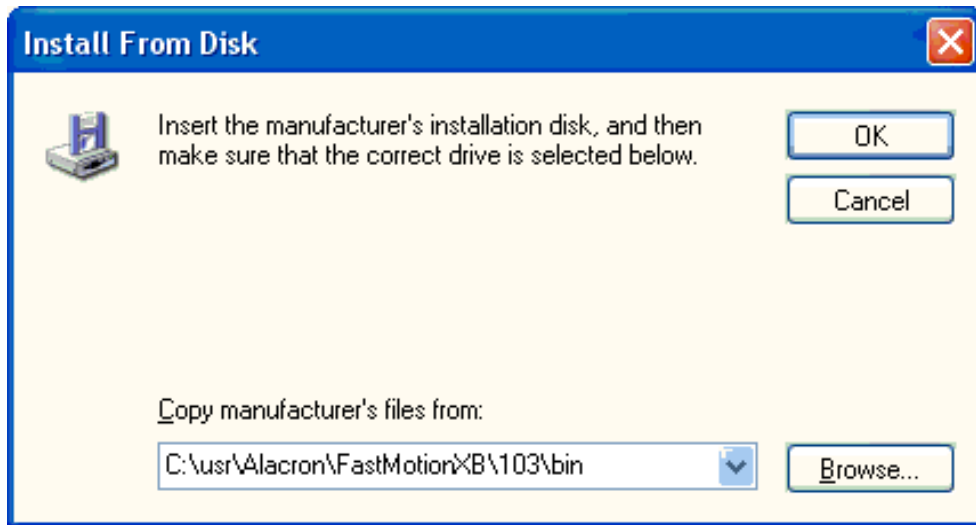
Step 7 – Select the radio button “**Don't search. I will choose the driver...**” and press the **Next** button to get the next screen:



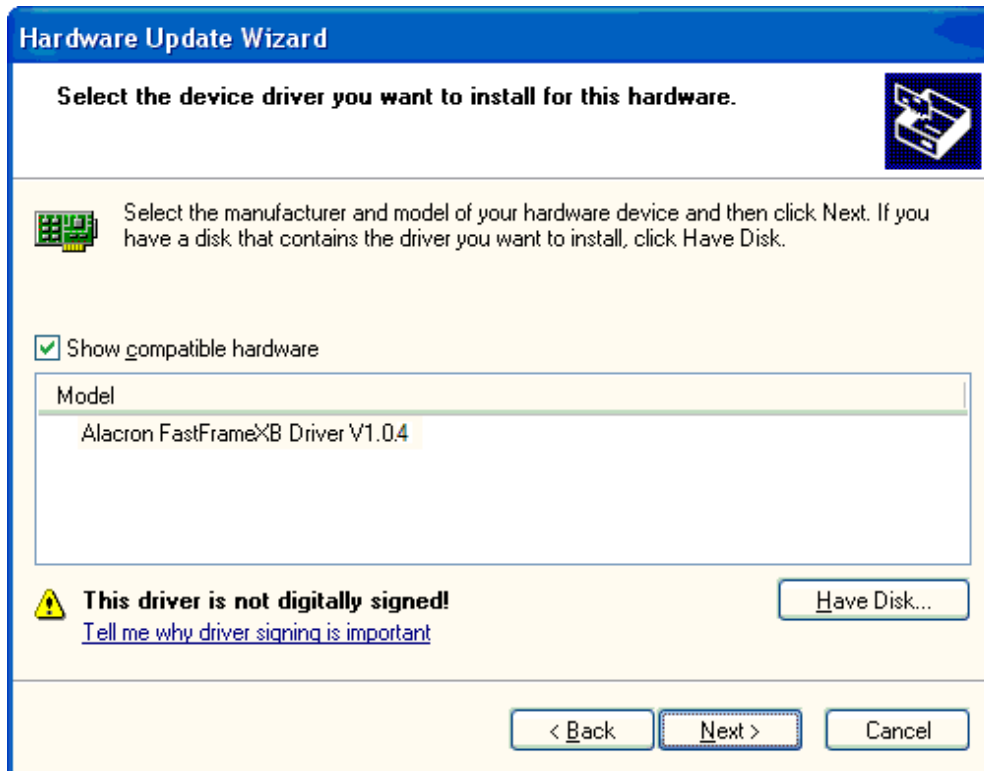
Step 8 – Press the “**Have Disk...**” button to get the following screen:



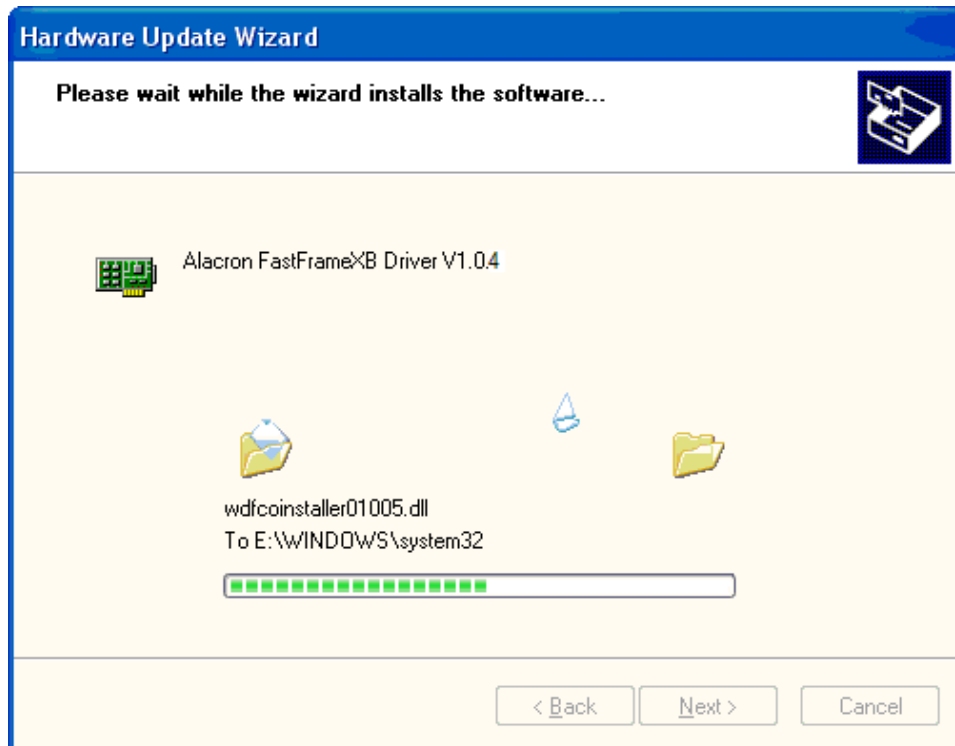
Step 8 – Press the “**Have Disk...**” button to get the following screen:



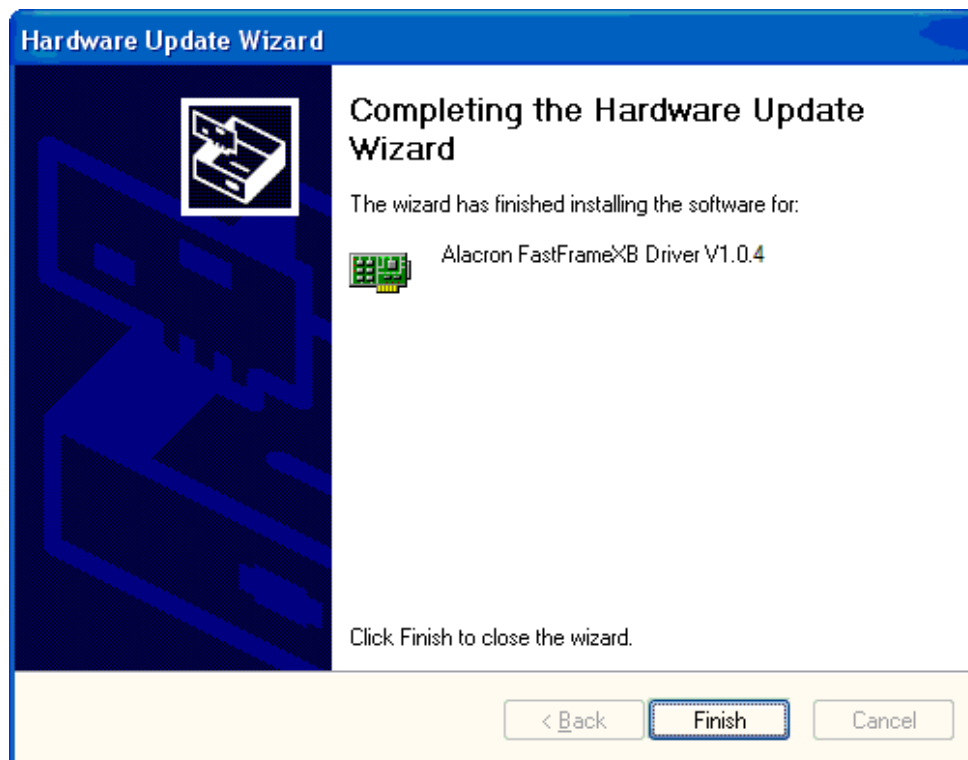
Step 9 – Type in the path, or Browse to the “bin” subdirectory where you installed the latest version of FastMotionXB.exe, and press the “OK” button to get the following screen showing the new driver:



Step10 – Press the “Next” button to start the installation, which will proceed with the following screen:



Step 11 – The screen above is displayed while the driver is being installed. Allow the installation to complete by itself. When it does, the following screen will appear:



Step 12 – Press the **"Finish"** button. This completes the driver installation. The FFXB software is now ready to use. ENJOY!

INSTALLATION OF THE FASTFRAME-XB

C. Installing the FastFrameXB Card bus

The FF-XB uses the industry standard format called the Express Card 34 mm or 54 mm form factor. This means the FF-XB uses one slot in your computer.

You can install the FF-XB at any time, with the power on or off, AFTER you have installed the software. The card is installed with the 'ALACRON / FastFrame-XB' in large letters visible. The end of the card with the two rows of small holes for nearly the full width of the card goes into the computer. The metal "D" shaped connector will end up sticking out of the side of your computer.

When you install the card into your computer you may hear a double tone, indicating that the driver was found and installed.

Should you wish to remove the FF-XB from your computer, you should exit all the programs that might be using the board, and then click on the small icon in your icon tray at the bottom right of the screen, and select "**safely remove the Alacron FastFrame Card Bus**". The system will advise you if it is safe to remove it. If the system says "**try again later**", be sure you have exited all the programs that might be using the board. If that does not work, then power down your computer and remove the FF-XB.

RUNNING FASTMOTION-XB

Step1 -- Connect your camera to the FastFrame XB frame grabber, using an appropriate cable. Power it on, etc., etc.

Step2 – Use an appropriate Camera Control program to set up your camera for 1 Tap, 8 bits with an ROI of 1280x1024.

Step3 – Launch FastMotionXB from the ICON on the Desktop or the Start Menu.

Step4 – Press "Select Camera" button and choose the appropriate camera setup (currently there is only one).

Step5 – Press "Start Grab" to view motion video.

Step6 – Press "Stop Grab" to stop video, and / or "Exit" to quit the program.

GENERAL INFORMATION

D. Troubleshooting

There are several things you can try before you call Alacron Technical Support for help.

- _____ Make sure the computer is plugged in. Make sure the power source is on.
- _____ Go back over the hardware installation to make sure that the system is properly installed.
- _____ Go back over the software installation to make sure you have installed all necessary software.
- _____ Run the Installation User Test to verify correct installation of both hardware and software.
- _____ Run the user-diagnostics test for your main board to make sure it's working properly.
- _____ Insert the Alacron CD-ROM and check the various Release Notes to see if there is any information relevant to the problem you are experiencing.

E. Alacron Technical Support

Alacron offers technical support to any licensed user during the normal business hours of 9 a.m. to 5 p.m. EST. We offer assistance on all aspects of processor board and PMC installation and operation.

1. Contacting Technical Support

To speak with a Technical Support Representative on the telephone, call the number below and ask for Technical Support:

Telephone: 603-891-2750

If you would rather FAX a written description of the problem, make sure you address the FAX to Technical Support and send it to:

Fax: 603-891-2745

You can email a description of the problem to support@alacron.com

Before you contact technical support have the following information ready:

- _____ Serial numbers and hardware revision numbers of all of your boards. This information is written on the invoice that was shipped with your products.
- _____ Also, each board has its serial number and revision number written on either in ink or in bar-code form.
- _____ The version of FastMotion Application software that you are using.
- _____ You can find this information in the About Dialog box.
- _____ The type and version of the host operating system, i.e., Windows XP.
- _____ Note the types and numbers of all your software revisions, daughter card libraries, the application library and the compiler
- _____ The piece of code that exhibits the problem, if applicable. If you email Alacron the piece of code, our Technical-Support team can try to reproduce the error. It is necessary, though, for all the information listed above to be included, so Technical Support can duplicate your hardware and system environment.

2. Returning Products for Repair or Replacements

Our first concern is that you be pleased with your Alacron products.

If, after trying everything you can do yourself, and after contacting Alacron Technical Support, you feel your hardware or software is not functioning properly, you can return the product to Alacron for service or replacement. Service or replacement may be covered by your warranty, depending upon your warranty.

The first step is to call Alacron and request a "Return Materials Authorization" (RMA) number.

This is the number assigned both to your returning product and to all records of your communications with Technical Support. When an Alacron technician receives your returned hardware or software he will match its RMA number to the on-file information you have given us, so he can solve the problem you've cited.

When calling for an RMA number, please have the following information ready:

- _____ Serial numbers and descriptions of product(s) being shipped back
- _____ A listing including revision numbers for all software, libraries, applications, daughter cards, etc.
- _____ A clear and detailed description of the problem and when it occurs
- _____ Exact code that will cause the failure
- _____ A description of any environmental condition that can cause the problem

All of this information will be logged into the RMA report so it's there for the technician when your product arrives at Alacron.

Put boards inside their anti-static protective bags. Then pack the product(s) securely in the original shipping materials, if possible, and ship to:

Alacron Inc.
71 Spit Brook Road, Suite 200
Nashua, NH 03060
USA

*Clearly mark **the outside of your package:***
Attention RMA #80XXX

Remember to include your return address and the name and number of the person who should be contacted if we have questions.

3. Reporting Bugs

We at Alacron are continually improving our products to ensure the success of your projects. In addition to ongoing improvements, every Alacron product is put through extensive and varied testing. Even so, occasionally situations can come up in the fields that were not encountered during our testing at Alacron.

If you encounter a software or hardware problem or anomaly, please contact us immediately for assistance. If a fix is not available right away, often we can devise a work-around that allows you to move forward with your project while we continue to work on the problem you've encountered.

It is important that we are able to reproduce your error in an isolated test case. You can help if you create a stand-alone code module that is isolated from your application and yet clearly demonstrates the anomaly or flaw.

Describe the error that occurs with the particular code module and email the file to us at:
support@alacron.com

We will compile and run the module to track down the anomaly you've found.

If you do not have Internet access, or if it is inconvenient for you to get to access, copy the code to a disk, describe the error, and mail the disk to Technical Support at the Alacron address below.

If the code is small enough, you can also:

FAX the code module to us at 603-891-2745

If you are faxing the code, write everything large and legibly and remember to include your description of the error.

When you are describing a software problem, include revision numbers of all associated software.

For documentation errors, photocopy the passages in question, mark on the page the number and title of the manual, and either FAX or mail the photocopy to Alacron.

Remember to include the name and telephone number of the person we should contact if we have questions.

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