



## **XSTREAM**™ SERIES FIRMWARE UPDATE INSTRUCTIONS

Revision A – December, 2007

### INTRODUCTION AND APPLICABLE MODELS

This document describes the firmware upgrade procedure for LeCroy XStream model oscilloscopes. The information specifically pertains to models in the following series:

**WaveExpert Series**  
**Serial Data Analyzers (SDA Series)**  
**WaveMaster 8000 & 8000A Series**  
**Disk Driver Analyzers (DDA Series)**  
**WavePro 7000 & 7000A Series**

**WaveRunner 6000 & 6000A Series**  
**WaveRunner Xi Series**  
**WaveSurfer Xs Series**  
**WaveSurfer 400 Series**

These models run on Windows2000, WindowsXP, or WindowsXPe operating systems.

Separate instructions can be found for LC/LT/93xx model oscilloscopes

at [http://www.lecroy.com/tm/Library/Software/FirmwareUpgrade/other\\_scopes.asp?menuid=8](http://www.lecroy.com/tm/Library/Software/FirmwareUpgrade/other_scopes.asp?menuid=8). WaveJet series instructions are included in the firmware .zip file download.

#### Why Upgrade My Firmware?

New versions are released several times each year and include code for enhancements, bug fixes, and new features. Keeping your oscilloscope up-to-date ensures you are making the most of your investment.

#### Release Notes

Release notes are provided for each new version. These notes provide information about the update and can be found at <http://www.lecroy.com/tm/library/manuals/productmanuals.asp?menuid=7&model=22>.

#### Determining Your Current Firmware Version

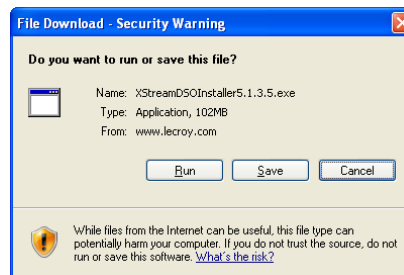
Your firmware version can be found on the **Status** tab of the **Utilities** dialog. Go to **Help** → **About** to show this screen.

#### Downloading the XStreamDSO Installer

The installer for the latest version of XStream firmware can be found

at <http://www.lecroy.com/tm/library/software/firmwareupgrade/default.asp?menuid=8>. This webpage includes links for each oscilloscope series. Select the link for your oscilloscope to show its corresponding download page.

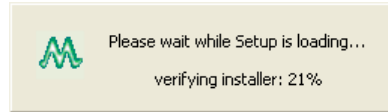
Click the **Download** button to continue. You may be routed to a registration screen. If you have already registered, login. Once registered, a **File Download** pop-up is shown (at right). Click the **Save** button and save the installer to disk.



When downloading the installer from the oscilloscope, save it to a convenient location such as the desktop or the D:\Applications folder. When downloading from a remote PC, copy the installer to the oscilloscope before executing.

### Running the Installer

Run the installer by first exiting the oscilloscope application by selecting **File → Exit**. Find the location where you saved the installer file, and double-click it to launch the installation wizard. Click through any initial security screens (at this point, the installer takes a minute or so to unpack its data). The **Welcome Screen** is eventually shown as follows:

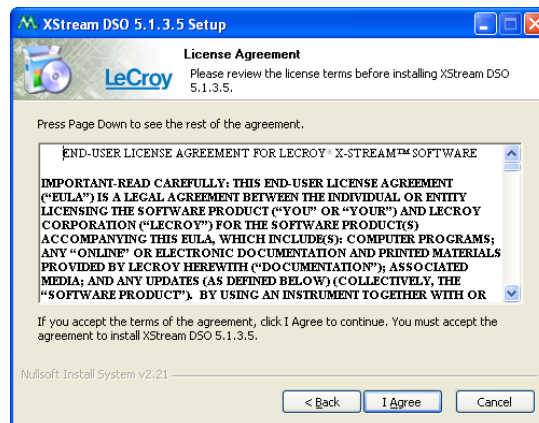


The wizard takes you through a series of screens (clicking buttons to proceed) and prompts you for any necessary information.

### Installation Process

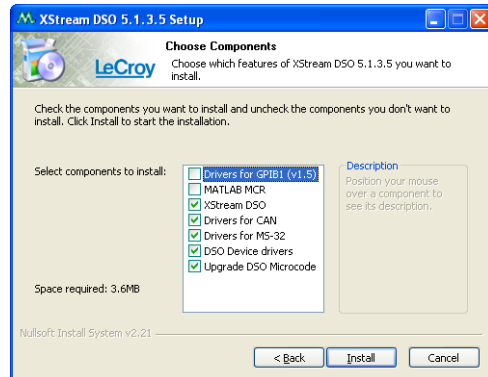
The XStream installer includes multiple components, including the oscilloscope application, required DLLs, drivers, etc. It also includes the low-level microcode for several integrated circuits on your oscilloscope. When you launch the installer, the installation wizard opens. Here is a brief description of the screens found sequentially in the wizard:

1. **Welcome Screen** – No action required. Click the **Next** button to continue.
2. **License Agreement Screen** – Read the End-User License Agreement and click the **I Agree** button to continue.



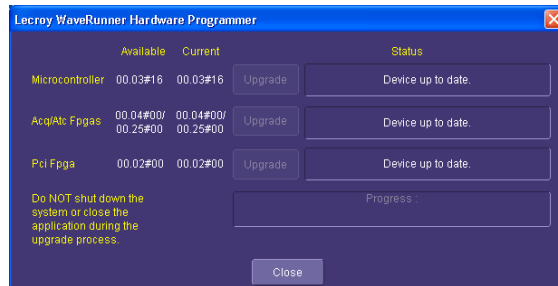
3. **Choose Components Screen** – The items listed with check-boxes selected by default cover most installation situations. Make your choices and click the **Install** button to proceed with the installation:

- **Drivers for GPIB** – Leave unchecked unless you have an **internal** GPIB card in your oscilloscope
- **MATLAB MCR** – Leave unchecked unless directed by Tech Support to include this component.
- **XStreamDSO** – Installs the oscilloscope application.
- **Drivers for CAN** – Installs drivers for the CAN trigger module. This component may be unselected, but leaving it checked will not cause any problems.
- **Drivers for MS-32** – Installs drivers for the MS-32 Mixed-Signal option. This component may be unselected, but leaving it checked will not cause any problems.
- **DSO Device Drivers** – Installs low-level drivers for various devices in the oscilloscope.
- **Upgrade for DSO Microcode** – Installs microcode for several IC's

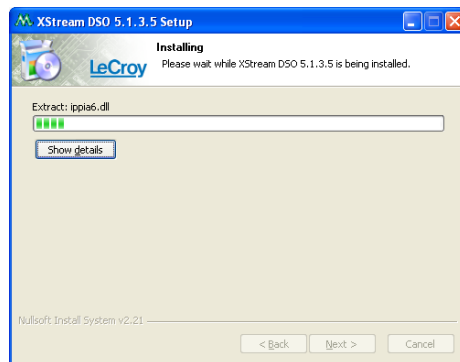


At this point, the selected components are installed. Depending on your model oscilloscope and the length of time since the last firmware upgrade, additional screens may pop-up and close automatically, or you may be prompted to agree to install software that has not passed Windows Logo testing. For any of these screens, click the button that allows the installation to continue.

4. **Hardware Programmer Screen** – If the installer includes a newer version of microcode (than what is currently loaded in one of several programmable ICs on your oscilloscope) the Hardware Programmer screen is shown.



**Note** : This is a separate window from the XStream Installer. Click on any active Upgrade buttons to begin the microcode upgrade process. The screen includes a progress box that shows the status of the upgrade.



**WARNING:** Do not power down the oscilloscope while microcode is being installed.

5. **Final Screen** – Click the **Finish** button to exit the installer. Make sure no microcode upgrading is in progress and then reboot the oscilloscope (even if the installer does not prompt for a reboot).



### Additional Information

Upgrading your oscilloscope's firmware **does not** modify or delete any **saved panel setups, waveforms, or screen-shots**. Updates also **do not** affect **keycodes** entered to enable additional hardware of software features.

### Technical Support

For technical support, contact your local Customer Care Center at <http://www.lecroy.com/tm/ServiceSupport/default.asp#Info>, or enter the tech support issue online at <http://www.lecroy.com/tm/ServiceSupport/TechnicalHelp/default.asp?menuid=11>.