

# Lens Driver Firmware Flash Utility

## Prerequisites

### Java Runtime Environment (JRE)

A valid J2SE Runtime Environment 5.0 installation is required for flashing the firmware to Lens Driver V4. You will be able to launch the required installation from the main application window should you need to do so.

### Microsoft .Net Framework

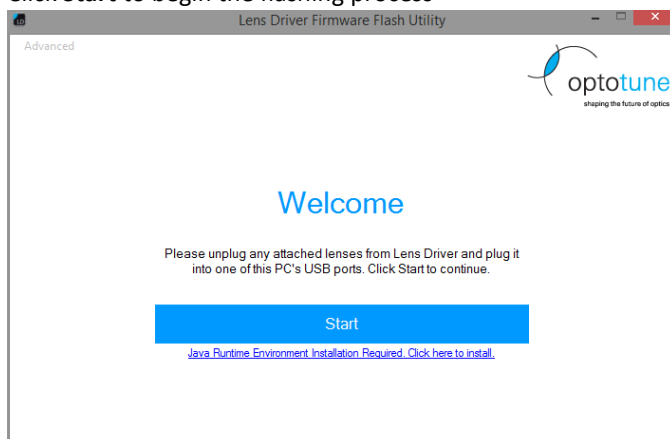
Microsoft .NET Framework 4 is required for the application. The setup which you use to install this application will take care of this installation if the software should not already be present on your system.

## Installation

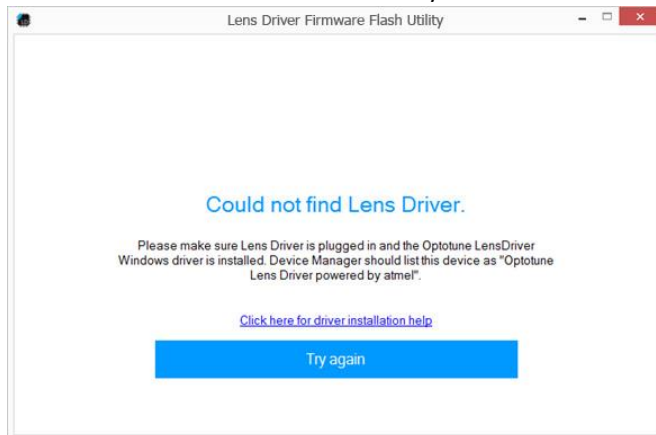
- Uninstall all old versions from **Lens Driver Firmware Flash Utility** (or the old **Lens Driver Firmware Upgrade Utility**) from Windows Control Panel
- Double click on **setup.exe** and follow the installation wizard.

## Usage

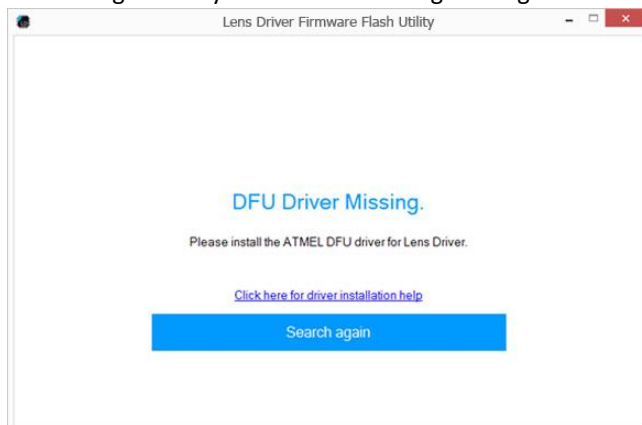
- Launch the application from the start menu (Shortcut can be found in Start → Optotune AG → Lens Driver Firmware Flash Utility)
  - Confirm with **Yes** when you see a **User Account Control** window asking you if you want to allow this application to make changes to your computer.
- If you do not have J2SE Runtime Environment 5.0 installed (you can check this in the Windows **Control Panel → Programs and Features**), the flashing process will fail. The required installation can be launched by clicking on the link **Java Runtime Environment Installation Required. Click here to install** (see screenshot below).
- Plug in the Lens Driver you wish to flash into the USB port of your computer (Important: Make sure that no lens is connected to Lens Driver)
- Click **Start** to begin the flashing process



- If you connect the Lens Driver for the first time to your computer, you have to install the Optotune Lens Driver Windows driver first. Then you should see the following message:

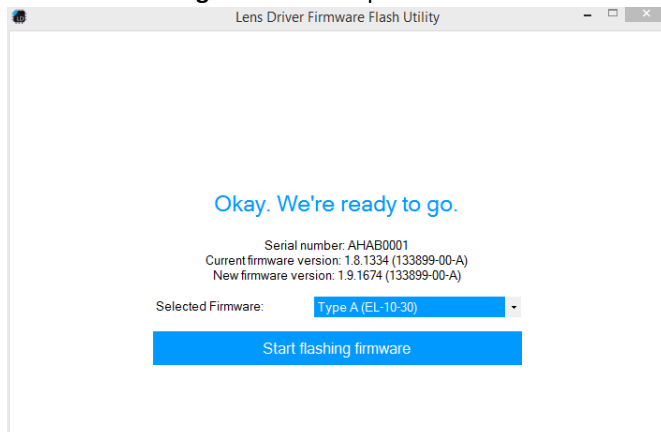


- Click on **Click here for driver installation help** and follow the instructions on screen to install the "Optotune Lens Driver" Windows driver. More details are described in the **FAQ section** at the end of this document (copied from the Lens Driver manual). If this is done, you can continue the wizard by clicking **Try again**.
- The application will first set your Lens Driver into DFU mode which is required to upload a new firmware.
- If you flash a Lens Driver firmware for the first time, you have to install the Atmel DFU Windows driver at this stage. Then you see the following message:

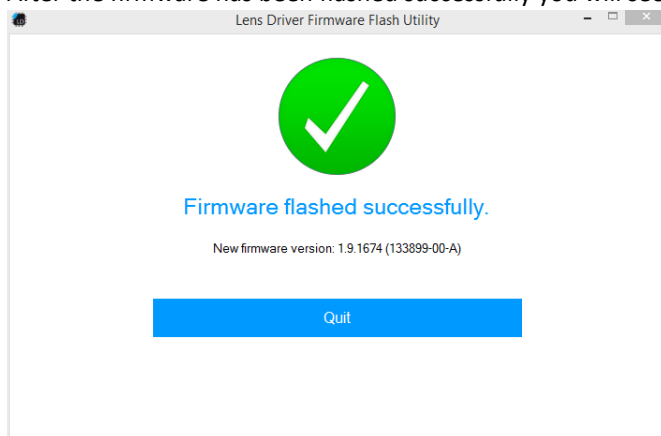


- Click on **Click here for driver installation help** and follow the instructions on screen to install the DFU driver. If this is done, you continue the wizard by clicking **Search again**.
- By default the same firmware type as is currently programmed to your Lens Driver is selected. If you want to flash a different firmware type to your Lens Driver V4, you can do so by selecting the appropriate type from the dropdown menu (In order to select a complete custom firmware file, hold Shift + click on **Start flashing firmware**. A window opens where you can select a custom firmware hex-file.)

- Click **Start flashing firmware** to upload the new Lens Driver firmware.



- After the firmware has been flashed successfully you will see the following message



## FAQ Section

### How do I install the Windows Driver for Optotune Lens Driver?

- IMPORTANT:** Please disconnect any lenses from the Lens Driver hardware!
- Connect Lens Driver to a free USB port on your PC.
- Windows will now try to install a driver. This process won't succeed because of a missing driver software. This can be ignored.
- Open Windows "Device Manager" by clicking on "Open Device Manager" below.
- Windows 7, 8, 8.1:**  
In "Device Manager" navigate to the category "Other devices", right click on the device "Optotune LD" and select "Update Driver Software...".
- Windows 10:**  
In "Device Manager" navigate to the category "Ports (COM & LPT)", right click on the device "USB Serial Device (COMX)" and select "Update Driver Software...".
- Select "Browse my computer for driver software".
- Click on "Browse" and navigate to the installation directory of this application (see below for installation directory). Confirm the folder choice by clicking "OK".
- Make sure "Include subfolders" is checked and click "Next".
- Click "Next" in the "Update Driver Software" window.
- Click "Install this driver software anyway" if you see a publisher verification security warning.
- The installation proceeds and installs the Windows driver.

- The Windows driver is successfully installed if you see a device called "Optotune Lens Driver powered by atmel" in the section "Ports (COM & LTP) " within the "Device Manager".
- Your Lens Driver is ready to go.

#### How do I install the DFU driver for Optotune Lens Driver?

- **IMPORTANT:** Please disconnect any lenses from the Lens Driver hardware!
- Windows will now try to install a driver. This process won't succeed because of a missing driver software. This can be ignored.
- Open "Device Manager" by clicking on "Open Device Manager" below.
- In "Device Manager" navigate to the category "Other devices", right click on the device "ATm32U4DFU" and select "Update Driver Software...".
- Select "Browse my computer for driver software".
- Click on "Browse" and navigate to the installation directory of this application (see below for installation directory). Confirm the folder choice by clicking "OK".
- Make sure "Include subfolders" is checked and click "Next".
- Click "Next" in the "Update Driver Software" window.
- The installation proceeds and installs the Windows driver.
- The Windows DFU driver is successfully installed if you see a "ATmega32U4" in the section "Atmel USB Devices" within the "Device Manager".
- Your Lens Driver is ready to go.