



ClonePix™ 2

Clone Picking Software

Version 1.5

Software Upgrade Guide

ClonePix 2 Software Upgrade Guide

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Chapter 1: Upgrading ClonePix 2 Software

The ClonePix™ 2 Clone Picking Software controls the ClonePix™ 2 Clone Picking System.

This document describes how to upgrade the from a previous version of the software. If you need to install the software on a computer that does not have a version of the software installed, see the *ClonePix 2 Software Installation Guide*.

The following topics are included in this document:

- [Computer System Requirements on page 3](#)
- [Backing Up the Previous Version Configuration on page 4](#)
- [Uninstalling the Previous Version of the Software on page 4](#)
- [Subsystem Firmware Update on page 5](#)
- [Installing the ClonePix 2 Software Upgrade on page 5](#)
- [Obtaining a License for the Software on page 5](#)
- [Starting the System and the Software on page 10](#)
- [Re-Installing the Previous Version of the Software on page 12](#)
- [Obtaining Support on page 13](#)

Computer System Requirements

The ClonePix 2 Software requires the following computer specifications:

Table 1-1: Computer System Requirements

Item	Description
Operating system	Windows 7, 32-bit
Memory	4 GB RAM or more
Data Connection	10/100 Ethernet port
Camera Connection	USB 2.0 port



CAUTION! Do Not replace the computer operating system with one of your own computers. The computer supplied with your system includes hardware components specifically configured to control your instrument.

Backing Up the Previous Version Configuration

Before removing the previous installation of the software, you must back up the configuration in case you need to reinstall it later.

The recommended process is two steps:

1. [Add a Windows System Restore Point on page 4](#)
2. [Back up ClonePix 2 Software on page 4](#)

Add a Windows System Restore Point

If you are using the Windows 7 operating system, do the following:

1. Click **Start > Control Panel > System and Security**, and then click the **System** link.
From the **Start** menu, you can also get to the **System** screen by typing **SYSTEM** in the **Search** field, and then click **System** from the results list.
2. In the left panel, click the **System Protection** link.
3. In the **System Properties** dialog, click the **System Protection** tab and then click **Create**.
4. In the **Create a Restore Point** dialog, choose a name that you will remember, such as the current date or the name of a program you are about to install.
5. When the message **The restore point was created successfully** appears, click **Close**.
6. In any other related open dialogs, click **Close** to finish.

Back up ClonePix 2 Software

To back up your current configuration:

1. Click **Start > All Programs > Molecular Devices > ClonePix 2 Software > Configuration Manager**.
2. In the **Fusion Configuration Manager**, click **Backup To File**.
3. In the **Backup Fusion Configuration** dialog, type the version number of the currently installed software and the date and then click **OK**.
4. In the **Save Configuration File** dialog, locate and select the folder where you want to save the backup file, type a **File name**, and then click **Save**.

Uninstalling the Previous Version of the Software

1. Click **Start > Control Panel**.
2. Under **Programs**, click **Uninstall a program**.
3. From the list of programs, click **ClonePix 2**.
4. Click **Uninstall**.
5. Follow the on-screen instructions to finish uninstalling the software.

Subsystem Firmware Update

If the most recent version of the software was modified to work with new firmware for a critical subsystem, then you must first run a firmware update for this subsystem before updating the ClonePix 2 Clone Picking Software.

The firmware update and installer are contained in a file named **Firmware Loader.zip**. If you did not receive this file along with the software upgrade, contact Technical Support. See [Obtaining Support on page 13](#).

To update the subsystem firmware:

1. Download the **Firmware Loader.zip** file to the system computer.
2. Power on the ClonePix 2 system computer and instrument.
3. Extract the contents of the **Firmware Loader.zip** file.
4. Open the folder where you extracted the contents of the **Firmware Loader.zip** file and then double-click the **MolecularDevicesFirmwareLoader.exe** file.
5. In the **Firmware Loader** utility, click **Update Firmware**.
If the firmware is up-to-date, the utility informs you of this and discontinues the firmware update process.



CAUTION! After starting the firmware update, do not close the utility until after the Status message indicates that the firmware update is complete.

6. Click **Close**.

Installing the ClonePix 2 Software Upgrade

1. Download the upgrade installation file to the system computer.
2. Double click the **ClonePix 2 v.1.5.msi** file to start the installation program.
3. Follow the on-screen instructions to finish installing the software upgrade.



Note: Before starting the software, update the subsystem firmware. See [Subsystem Firmware Update](#).

Obtaining a License for the Software

The first time that you start the ClonePix 2 software after completing the installation, the software prompts you for a license.

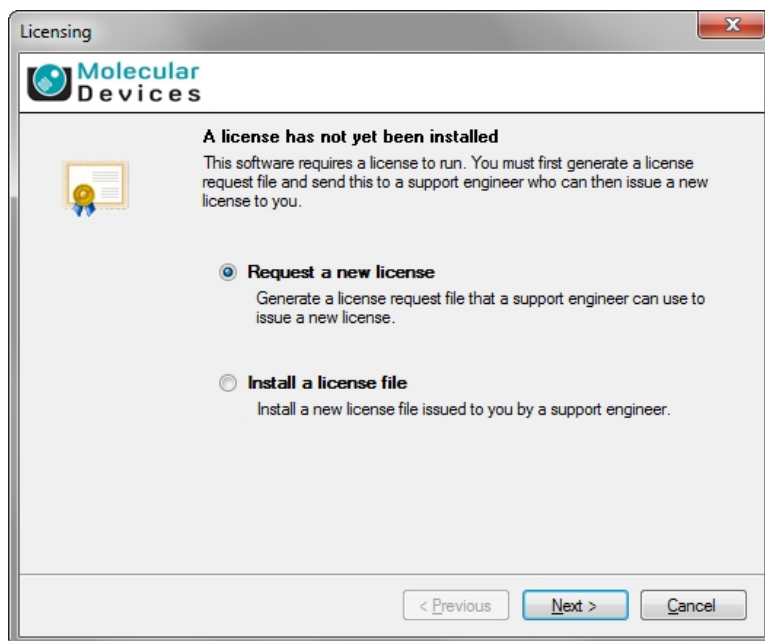
Licensing is a two step process:

1. [Requesting a Software License on page 6](#)
2. [Installing a Software License on page 7](#)

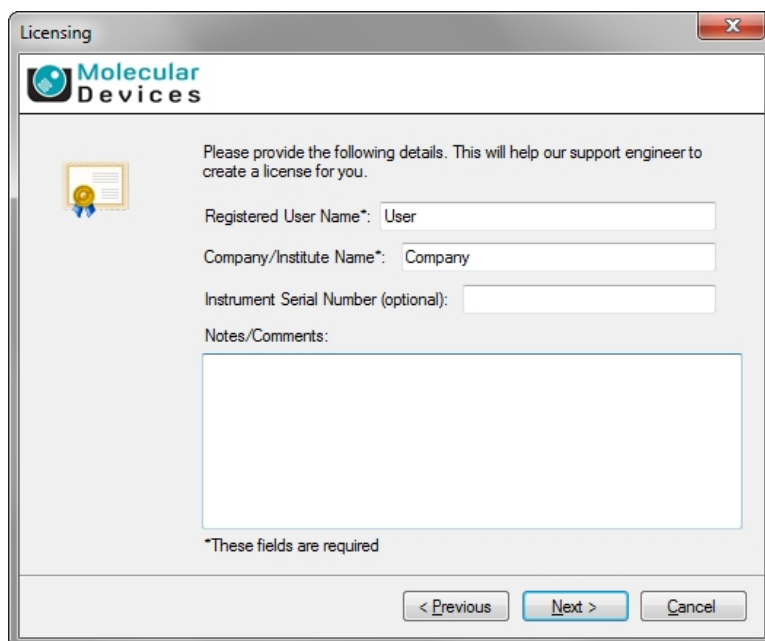
Requesting a Software License

To request a new software license:

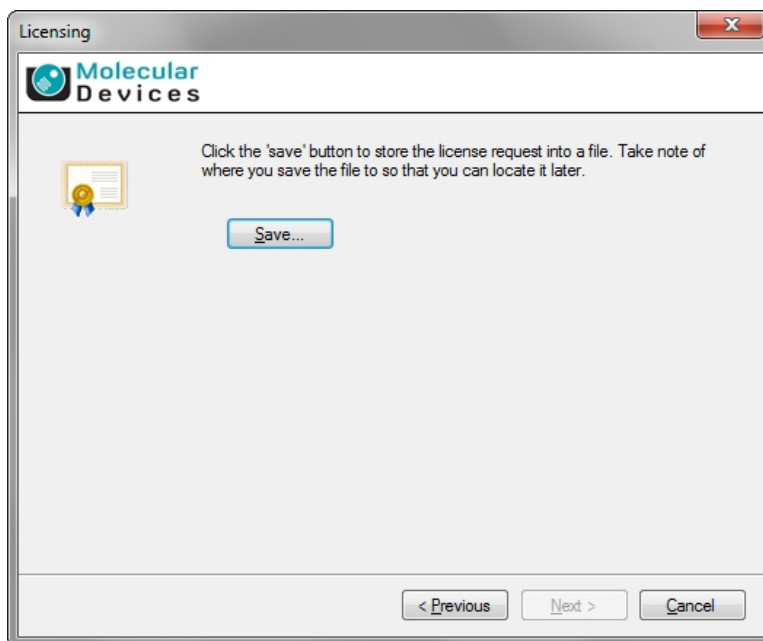
1. In the license message dialog, click **Yes**.
2. In the license request wizard, select **Request a new license**, and then click **Next**.



3. Enter the requested information, and then click **Next**.



4. To save the request file to a location on your computer for attaching it to an email, click **Save**.



5. In the **Save the request to a file** dialog, save the file in a location where you can easily find it.
6. To close the wizard, click **Finish**.
7. Change the **LicenseRequest.req** file name to a **LicenseRequest.txt** file, and then email it to Molecular Devices Technical Support. See www.moleculardevices.com/support.
8. After you receive the license file, save it on the system computer where it is easily accessible, and then install the license.

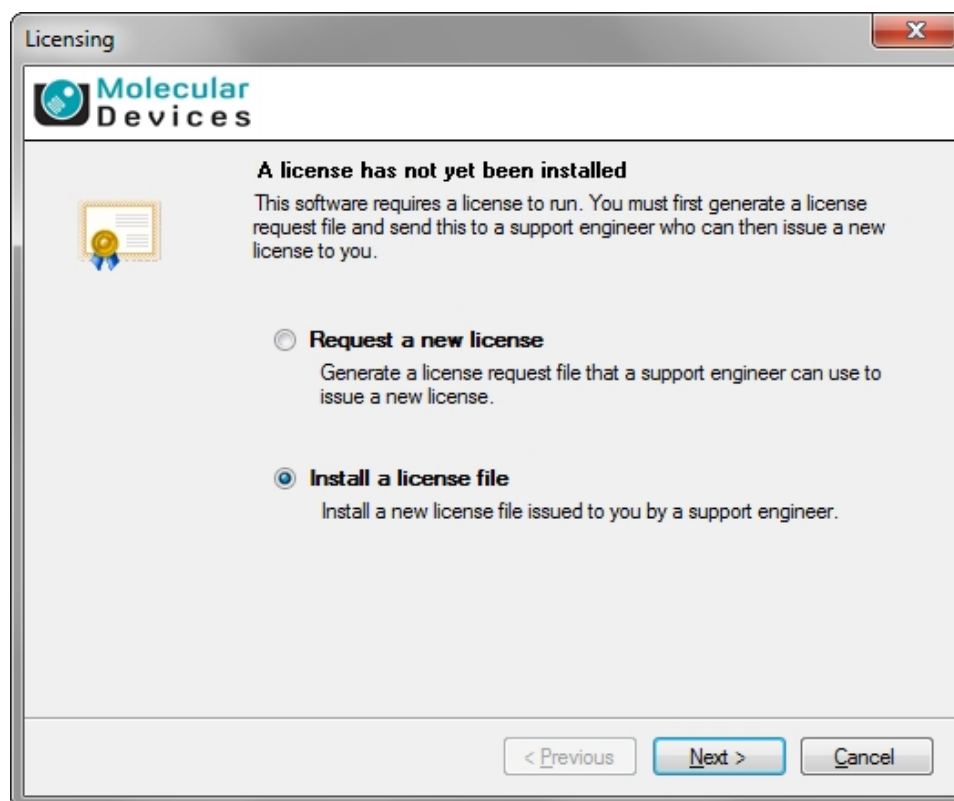
Installing a Software License

After you receive your license from Molecular Devices Technical Support, do the following:

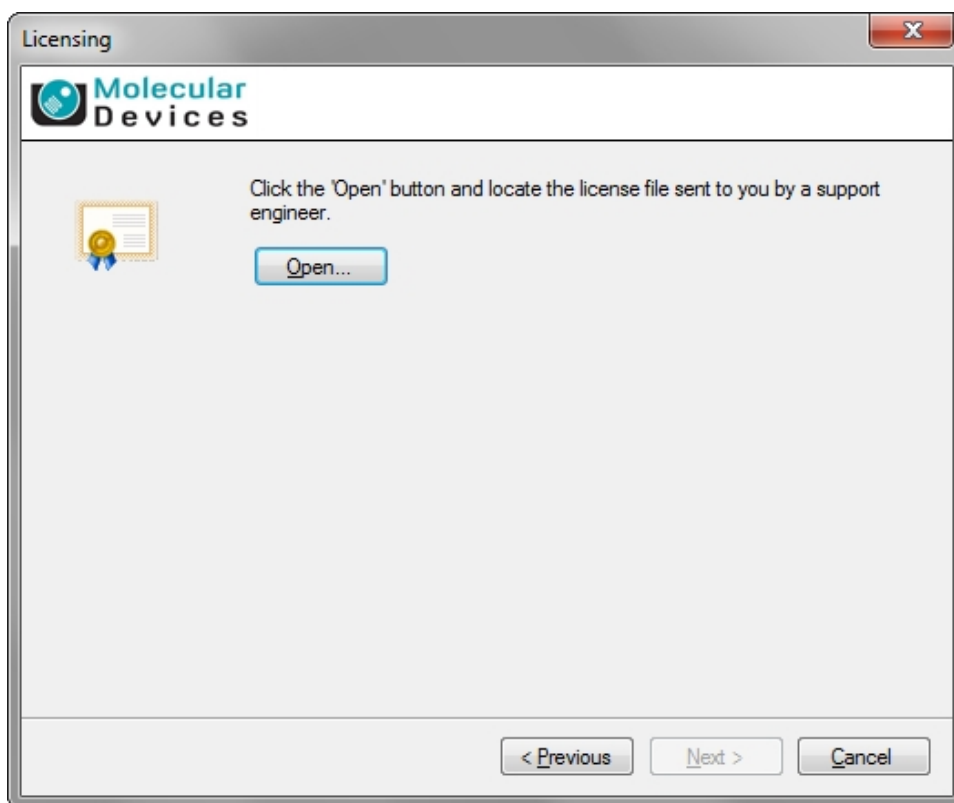
To install a software license:

1. From the computer desktop, double-click the CloneSelect Imager icon to start the software.

2. In the **Licensing** dialog, select **Install a license file** and then click **Next**.



3. Click **Open**.



4. In the **Select the License File to install** dialog, locate and select the license file you previously saved, and then click **Open**.
5. After the license file automatically installs, click **Finish**.

Starting the System and the Software

Before powering on the ClonePix 2 instrument and starting the software do the following:

- Verify that the robot and compressor are plugged in.
- Verify that the correct picking pins are installed in the picking head for the type of cells to be picked.



Tip: The picking pin type is engraved at the base of each pin. You might need to remove the pin from the head to confirm the pin type.

- **F1 Picking Pins** (400µm internal diameter; X4961) for suspension cell picking from semi-solid medium.
- **F2 Picking Pins** (700µm internal diameter; X4962) for adherent cell picking from liquid medium.

Before a Pick Run, picking pins should be cleaned by sonication in a 2% solution of QuClean (K2505) and autoclaved. It is advisable to autoclave the Picking Pin Removal Key (X4948) at the same time. See General Maintenance section of the Robot Manual for instructions.

If the picking pins need to be changed, remove the Picking Head and swap the pins. To do this, click on the Picking Head Management icon, then the Replace Head icon and follow the on-screen instructions. Refer to the General Maintenance section of the Robot Manual for guidance on how to remove and replace the head and the pins.

- Verify that instrument bed is clear of obstructions and loose items.
- Verify that all motor tracks are free of obstruction.
- Verify that there are no obstructions to movement of the picking head.
- Verify that the main robot axes, XY, are roughly in the center of their respective travel positions. The axes need to be away from their respective end-stops on start up so that they can reference themselves correctly to their home positions.
- Wipe the instrument bed with 70% ethanol using a lint-free cloth.
- Verify that no plates or cassettes are in the stackers.
- Verify that the instrument door is fully closed.
- Verify that the **Emergency Stop** button on the front panel of the instrument is pulled out.
- Fill the ethanol feed bottle with 70% ethanol and empty the ethanol waste bottle, as needed.
- Separately autoclave the picking feed bottle and cap assembly, then fill the Picking Feed

bottle with sterile deionized water and cap the bottle in a sterile tissue culture hood.

- Ensure that your picking waste bottle is empty before continuing.

Power On Procedure

Every time the instrument is used, the three axes sequentially run through their “Initialize drives” routine. This enables the drives to find their respective home positions. The system must complete this routine without interference to ensure that there is no damage to the instrument or its auxiliary equipment.

To power on the system:

1. Power on the compressor and ensure compressed air gauge is set to 80 psi (5.5 bar).
2. On the front panel of the instrument, push the **Start** button.
The **Power On** light illuminates.



Tip: If the power to the system does not turn on, make sure that the door is closed and the **Emergency Stop** button is pulled out.

The instrument cycles through various start-up processes indicated on the front indicator panel.

3. Power on the computer and wait for it to finish initializing.
4. From the computer desktop, double-click on the ClonePix 2 icon.

Re-Installing the Previous Version of the Software

If for some reason the newly installed version of software is not functioning correctly you can re-install the previous version.

1. Uninstall the newly installed software as described in [Uninstalling the Previous Version of the Software on page 4](#).

You do not need to back up the configuration for this version.

2. Insert the Recovery DVD or locate the downloaded installation file for the previous version of software.
3. Start the installation program and follow the on-screen instructions to re-install the software.

4. Click **Start > All Programs > > ClonePix 2 > Configuration Manager**.

5. In the **Fusion Configuration Manager**, click **Restore From File**.

6. Locate and select the backup file that you saved in [Backing Up the Previous Version Configuration on page 4](#).

7. Click **Open**.

8. After the configuration is restored, close the **Fusion Configuration Manager**.

9. Downgrade the firmware:

- a. Download the **Firmware_Downgrade.zip** file to the system computer.
- b. Power on the ClonePix 2 system computer and instrument.
- c. Extract the contents of the **Firmware_Downgrade.zip** file.
- d. Open the folder where you extracted the contents of the **Firmware_Downgrade.zip** file and then double-click the **MolecularDevicesFirmwareDowngrade.exe** file.
- e. In the **Firmware Loader** utility, click **Update Firmware**.

If the firmware is up-to-date, the utility informs you of this and discontinues the firmware update process.



CAUTION! After starting the firmware installation, do not close the utility until after the Status message indicates that the firmware installation is complete.

- f. Click **Close**.

10. Start and license the software. See [Obtaining a License for the Software on page 5](#).

Obtaining Support

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Our support web site, www.moleculardevices.com/support, has a link to the Knowledge Base with technical notes, software upgrades, safety data sheets, and other resources. If you do not find the answers you seek, follow the links to the Technical Support Service Request Form to send an email to our technical support representatives.

You can contact your local representative or contact Molecular Devices Technical Support by telephone at 800-635-5577 (North America only) or +1 408-747-1700. In Europe call +44 (0) 118 944 8000.

To find regional support contact information, visit www.moleculardevices.com/contact.

Please have your instrument serial number or Work Order number, and your software version number available when you call.

Contact Us

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