



QPix™ 450/460 Colony Picking Software

Hardware and Software

Software Release Notes

June 2014



www.moleculardevices.com

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The QPix™ 450/460 Colony Picking Software controls the QPix™ 450 and 460 Colony Picking Systems.

The following topics are included in this chapter:

- [Computer System Requirements](#)
- [Starting the System and the Software on page 6](#)
- [Backing Up the Existing Software Configuration on page 6](#)
- [Backing Up the Software Database](#)
- [Uninstalling the Basler Pylon SDK](#)
- [Uninstalling the Previous Version of the Software](#)
- [Installing the New / Software](#)
- [Obtaining a License for the Software on page 8](#)
- [Updating the Database](#)
- [Re-Installing the 1.x Software](#)
- [Ordering Information](#)
- [Obtaining Support on page 12](#)

Computer System Requirements

The QPix 450/460 Software version 1.6.10 upgrade requires the following computer specifications:

Table 1-1: Minimum Computer System Requirements

| Item | Description |
|-------------------|---|
| Operating system | Windows 7, 32-bit (x86) The software has not been validated on the Windows 7, 64-bit (x64) operating system. |
| Memory | 2 GB RAM |
| Data Connection | 10/100 Ethernet port |
| Camera Connection | USB 2.0 port |

Starting the System and the Software

Before starting the system and the software confirm the following conditions:

- The **Emergency Stop** button on the front panel of the instrument is pulled out. The instrument will not start if this button is pushed in.
- The instrument bed is clear of obstructions and loose items.
- All motor tracks are free of obstruction.
- There are no obstructions to movement of the head.
- The instrument door is fully closed.

Power-Up Procedure

To power-up the system:

1. Turn on the power supply to the compressor.
2. Push the green **Start** button on the front panel of the instrument.
The **Power On** light illuminates on the front indicator panel. If the power to the system does not turn on, it is possible that the door is open or the **Emergency Stop** button is pushed in.
The instrument cycles through various start-up processes indicated on the front indicator panel.
3. Check that the **Air Pressure OK** icon illuminates on the front indicator panel.
4. Switch on the computer and wait for it to finish initializing.



Note: 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.

Backing Up the Existing Software Configuration

Before upgrading the software, you must back up the existing software configuration in case you need to reinstall it later.

To run **Configuration Backup**:

1. Click **Start > All Programs > Molecular Devices > QPix 450/460 > Configuration Backup**. The **Fusion Configuration Manager** dialog is displayed.
2. In the **Fusion Configuration Manager**, click **Backup Current Configuration**.
3. Wait until the backup process ends, and the **Config Folder** reference is displayed in the Configuration backup list under **Date Created > Type > Comment**.
4. Close the dialog.

Uninstalling the 1.x Software

To uninstall the previous v1.x software:

1. Click **Start > Control Panel > Programs > Uninstall a program**.
2. From the list of programs, select **QPix 450/460**.
3. Click **Uninstall**.
4. Follow the on-screen instructions to finish uninstalling the software, and accept any warnings or messages that display.
5. If prompted, restart the computer.

Installing the QPix 450/460 Software Upgrade

The 1.6 software upgrade is available by download. Contact Technical Support for instructions. See [Obtaining Support on page 12](#).



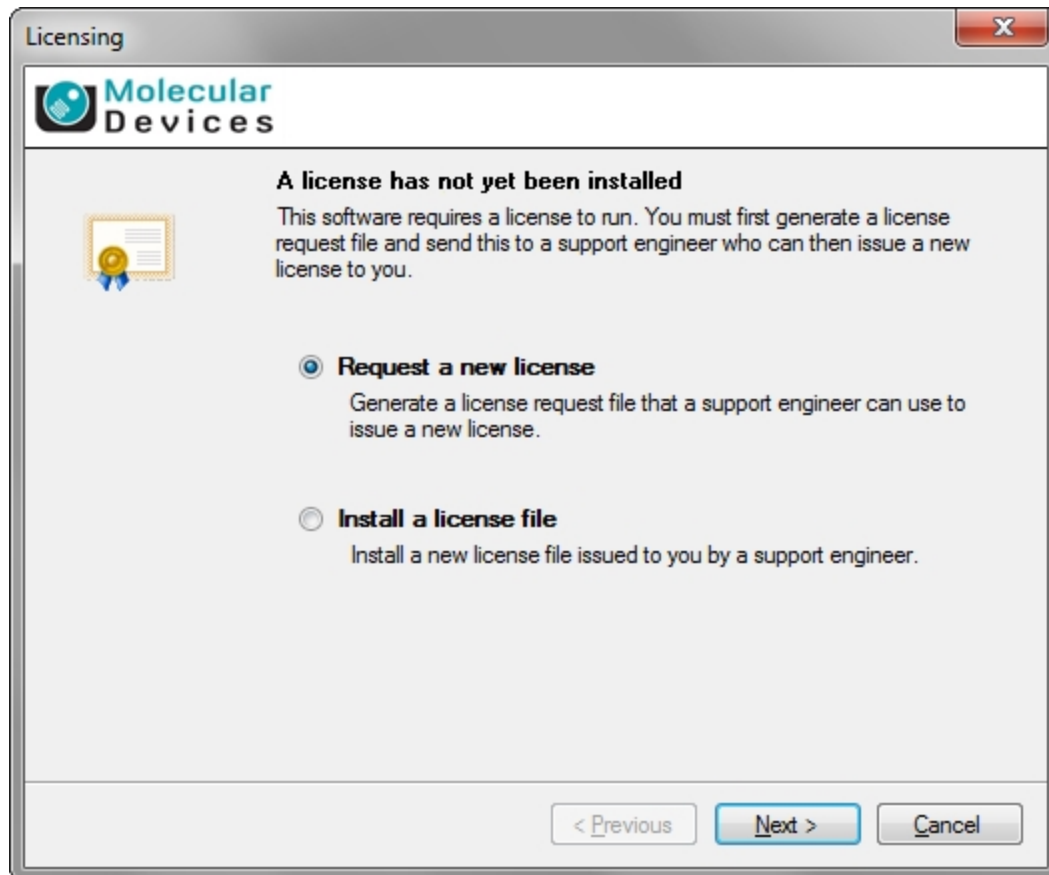
CAUTION: Backup your configuration installing the new software, because your system will be unrecoverable if an installation error occurs. See [Backing Up the Existing Software Configuration on page 6](#).

To install the QPix 450/460 Software Version 1.6.10 upgrade:

1. Download the upgrade installation file to the system computer.
2. Unzip the 1.6.10 upgrade software installer files.
3. Double click the **QPix 450-460 v.1.6.10.x.msi** file to start the installation.
4. Follow the on-screen instructions for the default (**Typical installation**) settings.
5. To let the installation complete, accept any warnings or messages that are displayed. If prompted, restart the computer.
6. You must now request a license file before the software can be used.

Obtaining a License for the Software

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



Follow the **Licensing** procedures in order:

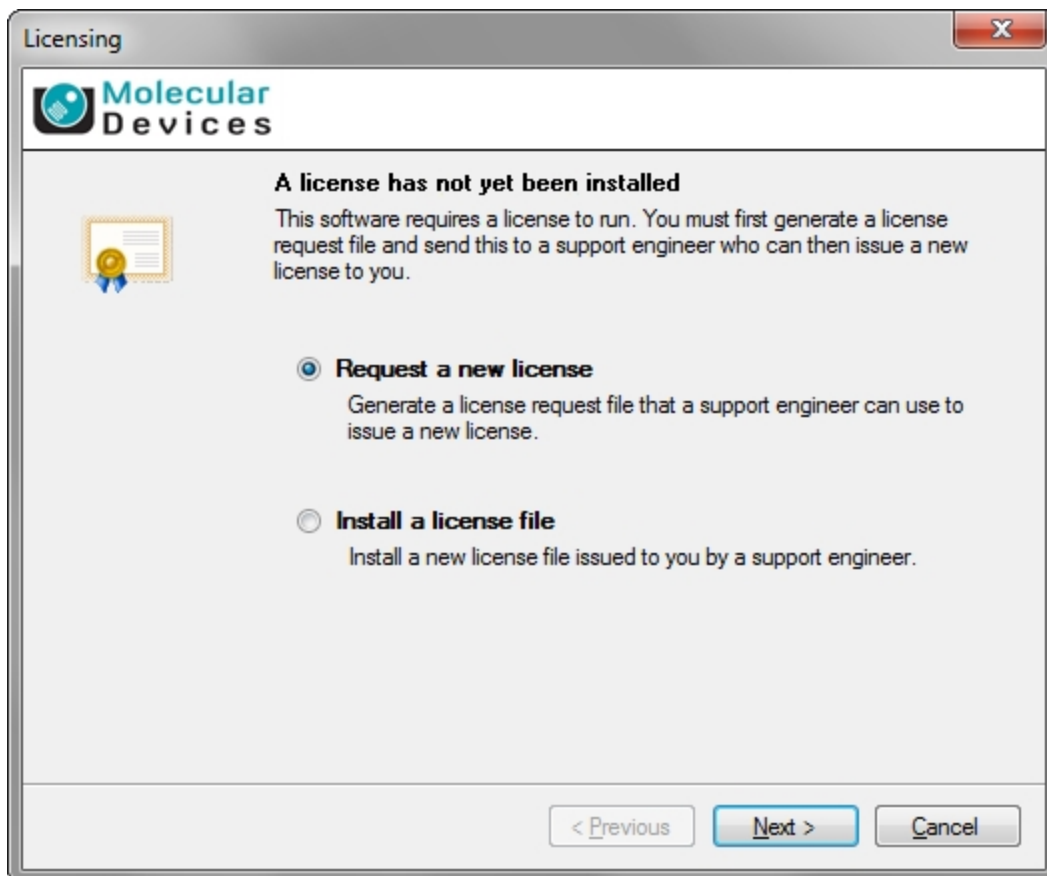
1. Request a new license. See [Requesting a Software License](#), see page 9.
2. Install a license file. See [Installing the Software License](#), see page 11.

Requesting a Software License

To request a software license:

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

The **Licensing** dialog is displayed.



2. Click **Request a new license** and then click **Next**.

Licensing

Molecular Devices

Please provide the following details. This will help our support engineer to create a license for you.

Registered User Name*: User

Company/Institute Name*: Company

Instrument Serial Number (optional):

Notes/Comments:

*These fields are required

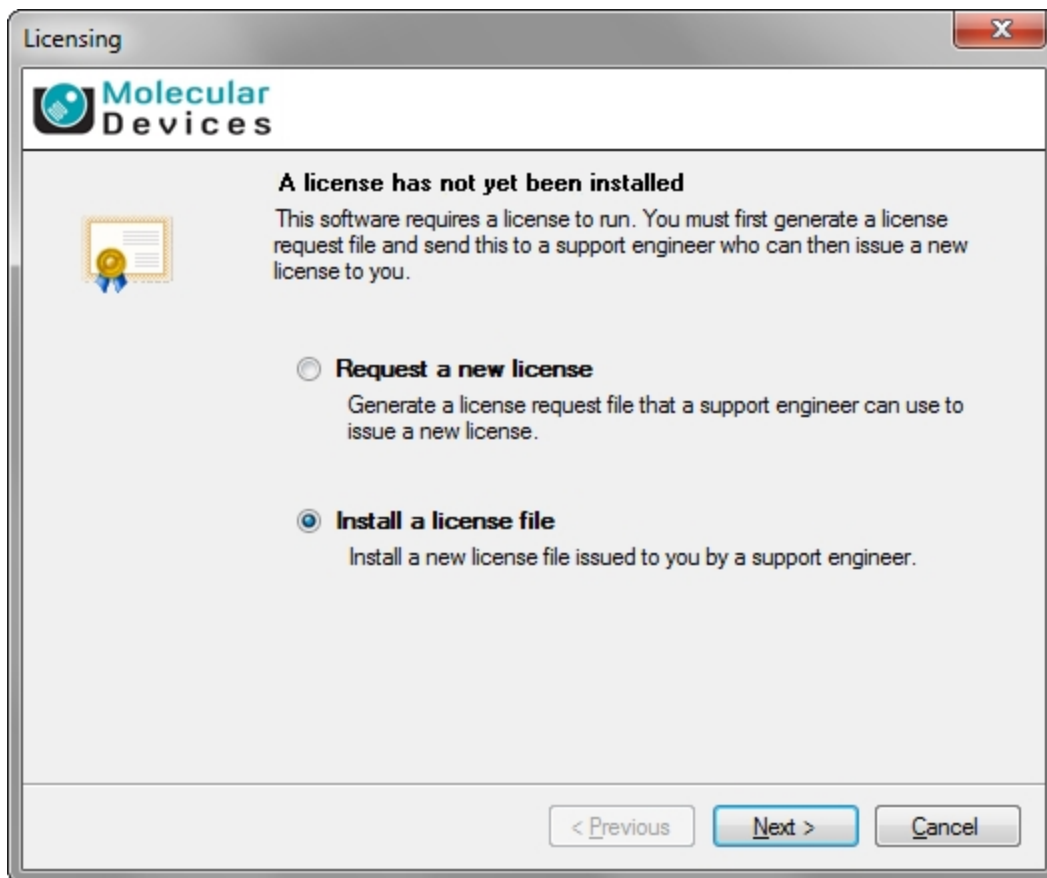
< Previous Next > Cancel

3. Enter the requested information in the dialog fields and then click **Next**.
4. Click **Save**.
5. In the **Save the request to a file** dialog, enter a file name and then save the file in a location where it is easy to find again.
6. Contact support to get a valid license file. See [Obtaining Support on page 12](#).
7. After you receive the license file, save it on the System computer where it is easy to find.

Installing the Software License

To install the software license:

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



2. In the **Licensing** dialog, click **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**.
The license file installs automatically
5. Click **Finish** to close the **Licensing** dialog.
6. If you are upgrading your software from QPix version 1.x software, you must now update the database before the software can be used. Continue to [Updating the Database](#).

If you are upgrading your software from QPix version 2.0, QPix 450/460 Software version 2.1 is now ready to use.

Re-Installing the 1.x Software

To downgrade software version 1.6.10 to an earlier software version 1.x:

1. Uninstall software version 1.6.10.



Note: You do not need to backup the configuration for this version.

- Click **Start > Control Panel > Programs > Uninstall a program**.
 - From the list of programs, select **QPix 450/460**, and click **Uninstall**.
 - Follow the on-screen instructions to finish uninstalling the software, accept any warnings or messages that are displayed. If prompted, restart the computer.
2. Insert the Recovery DVD or locate the downloaded installation file for software version 1.x.
 3. Start the installation program and follow the on-screen instructions to re-install software version 1.x.
 4. Click **Start > All Programs > Molecular Devices > QPix 450/460 QPix > 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 Existing Software Configuration on page 6](#).
 7. Click **Open**.
 8. After the configuration is restored, close the **Fusion Configuration Manager**.
 9. If prompted, start and license the software. See [Obtaining a License for the Software on page 8](#).

Obtaining Support

Molecular Devices is a leading worldwide manufacturer and distributor of analytical instrumentation, software and reagents. We are committed to the quality of our products and to fully supporting our customers with the highest possible level of technical service.

Our support web site, www.moleculardevices.com/support.html, 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 are seeking, follow the links to the Technical Support Service Request Form to send an email message to a pool of technical support representatives.

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

Please have the system ID number, system serial number, software version number, and the system owner's name available when you call.

Chapter 2: QPix 450/460 Software Version 1.6.10 Software Release Notes

The QPix 450/460 version 1.6.10 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 1.6, the last general release of the software.

- [Issues Addressed in Software v1.6.10](#)

Issues Addressed in QPix 450/460 Software v1.6.10

The following issues were addressed in QPix 450/460 Software version 1.6.10.

Incorrect Gridding Data in the Data Viewer

Tracking ID: 4595

The Gridding Processes data maps incorrectly in the Data Viewer.

Resolution:

The data for the Gridding Process maps in the Data Viewer as expected.

Impact of fix:

This fix has no impact on current workflow or data.

Chapter 3: QPix 450/460 Software Version 1.6 Software Release Notes

The QPix 450/460 version 1.6 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 1.5, the last general release of the software.

- [Modifications Made to QPix 450/460 Software v1.6 on page 15](#)
- [Issues Addressed in QPix 450/460 Software v1.6 on page 15](#)

Modifications Made to QPix 450/460 Software v1.6

The following modifications were made to QPix 450/460 Software version 1.6.

Active Pippette Warning Message

While the instrument door is open, a warning message reminds you for your safety that the pipette head can move during configuration procedures.

Tracking ID: 4405

Configuration Warning Message

To avoid potential damages to the instrument by making configuration changes, a warning message appears after selecting **Tools > Configuration**.

Tracking ID: 4449

Issues Addressed in QPix 450/460 Software v1.6

The following issues were addressed in QPix 450/460 Software version 1.6.

If a Distance Sensor Fails, a Minimum Picking Height Sets

Tracking ID: 3594

In rare situations, when a distance sensor fails, the software uses the minimum picking height setting, causing the potential for pins to crash into the trays or plates.

Resolution:

The new default minimum source tray picking height setting for the system now protects against the potential for pins to crash into the trays or plates if a distance sensor fails.

Impact of fix:

This fix has no impact on current workflow or data.

No Features Recognized When Picking with Fluorescent Camera

Tracking ID: 4424

Using the QPix fluorescent camera, a bug sometimes occurs where no features are recognized when picking the QTray.

Resolution:

The QPix fluorescent camera QTray picking now works as expected.

Impact of fix:

This fix improves current workflow or data.

Plaques not Being Recognized Nunc Omni Position 3 and 4

Tracking ID: 4436

Using Nunc OmniTrays with plaques, the software fails to recognize any plaques in positions 3 and 4. Only positions 1 and 2 are recognized. Imaging only position 3 and 4, skipping 1 and 2, yields the same result, no plaques are recognized. This does not happen when yeast is used in Nunc OmniTrays; only plaques fail to be recognized.

Resolution:

Plaques used in Nuc OmniTrays are recognized in all positions as expected.

Impact of fix:

This fix improves current workflow or data.

Invalid Value Error When Picking with Fluorescence

Tracking ID: 4460

Using **Picking Process > Picking > Picking Type > White Light And Fluorescent** causes the error **Value of '0.449999988079071' is not valid for 'Value'**.

Resolution:

Using **Picking Process > Picking > Picking Type > White Light And Fluorescent** now works as expected.

Impact of fix:

This fix improves current workflow or data.

Chapter 4: QPix 450/460 Software Version 1.5 Software Release Notes

The QPix 450/460 version 1.5 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 1.4, the last general release of the software.

- [New in QPix 450/460 Software v1.5 on page 18](#)
- [Modifications Made to QPix 450/460 Software v1.5 on page 23](#)
- [Issues Addressed in QPix 450/460 Software v1.5 on page 24](#)

New in QPix 450/460 Software v1.5

The following new features are included in QPix 450/460 Software version 1.5.

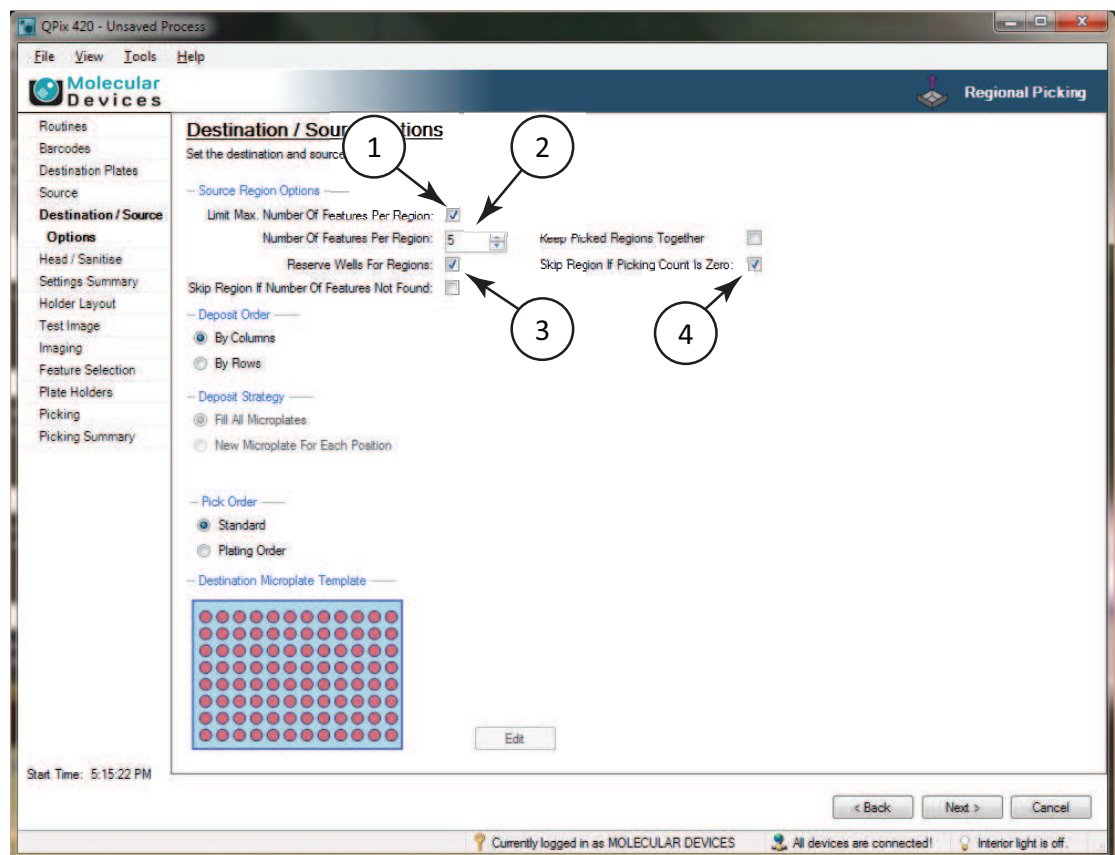
Skip Regions That Have a Picking Count of Zero

A new feature has been added to skip regions that have a picking count of zero if the **Reserve Wells For Region** check box is selected for a Regional Picking process.

Skipping Regions That Have a Picking Count of Zero

You can set this option when defining destination and source options for Regional Picking.

1. In the **Destination/Source Options** window, select the **Limit Max. Number Of Features Per Position** check box.



Note: Selecting this option means you cannot change this number in the **Feature Selection** section when running the routine. The maximum number per region is set here and cannot be changed during the run.

2. In the **Number of Features Per Region** list, edit the value to define the maximum number of features for picking in each region.
3. Select the **Reserve Wells For Regions** check box.

4. Select the **Skip Region If Picking Count is Zero** check box.
5. Make other desired selections in this window.
6. Click **Next** to continue.

Define the Number of Items to Pick in Each Region

A new feature has been added to define the number of items to pick in each region during a Regional Picking process.

Defining the Number of Items to Pick

You can set this option after creating a test image while running a Regional Picking process.



Note: To enable this feature, you must have the **Reserve Wells For Regions** check box selected in the **Destination/Source Options** window before starting the run.

1. In the **Feature Selection** window, define the attributes of the items to pick.
2. Right-click the **Limit Colonies** list and then click **Edit**.
3. In the **Edit Regional Feature Picking Count** find the row for the region or regions for which you want to limit the picking count.
4. Type a value in the **Picking** column for each region that you want to edit. The value cannot be greater than the previously defined maximum number of features for picking in each region.
5. Click **Save Changes**.
6. Click **Exit**.

Automatically Threshold Individual Frames or Regions

A new feature has been added to enable the system to automatically threshold each frame individually for Picking or each region individually for Regional Picking. When enabled, each frame or region is processed with its own uniquely calculated value instead of a value calculated of the entire tray.

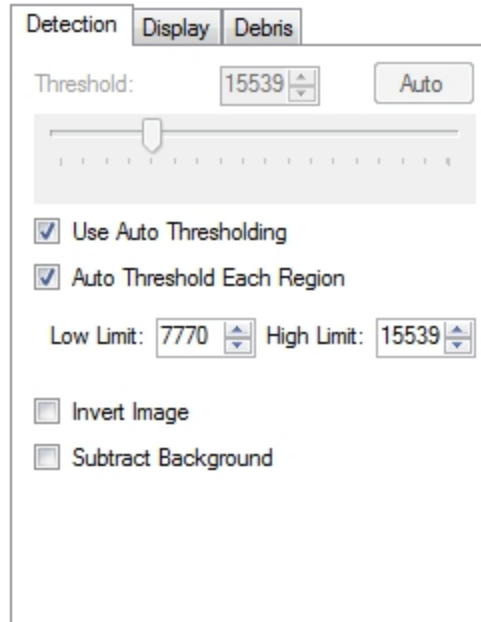
You can select individual auto thresholding in the **Test Image** or **WL Test Image** window during the Picking or Regional Picking operation.

- To automatically threshold each frame individually for Picking, select the **Auto Threshold Each Frame** check box.
- To automatically threshold each region individually for Regional Picking, select the **Auto Threshold Each Region** check box.

Enabling the System to Automatically Threshold Individual Regions

You can set this option after you create a white light test image for Regional Picking.

1. After loading the source, click **Next**. The instrument takes a white light test image of the source receptacle and the software displays the **Test Image**, or **WL Test Image**, window.
2. If necessary, adjust the **Exposure** and **Gain**, and then click **Grab Image** to apply the settings.
3. In the **Detection** section, select the **Use Auto Thresholding** check box to automatically detect colonies.



4. Select the **Auto Threshold Each Region** check box to process each region with its own uniquely calculated value.
To process the regions using a value calculated of the entire 48-region QTray, clear this check box.
5. With the **Auto Threshold Each Region** check box selected, optionally type threshold values in the **Low Limit** and **High Limit** fields.
 - To determine the **Low Limit** value, clear the **Use Auto Thresholding** check box and then drag the slider to the left until some background is clearly detected. Select the **Use Auto Thresholding** check box and the **Auto Threshold Each Region** check box again and then type the value from the **Threshold** field into the **Low Limit** field.
 - To determine the **High Limit** value, clear the **Use Auto Thresholding** check box and then drag the slider to the right until some colonies start to become undetected. Select the **Use Auto Thresholding** check box and the **Auto Threshold Each Region** check box again and then type the value from the **Threshold** field into the **High Limit** field.
6. Make other desired adjustments in this window.
7. Click **Next** to continue.

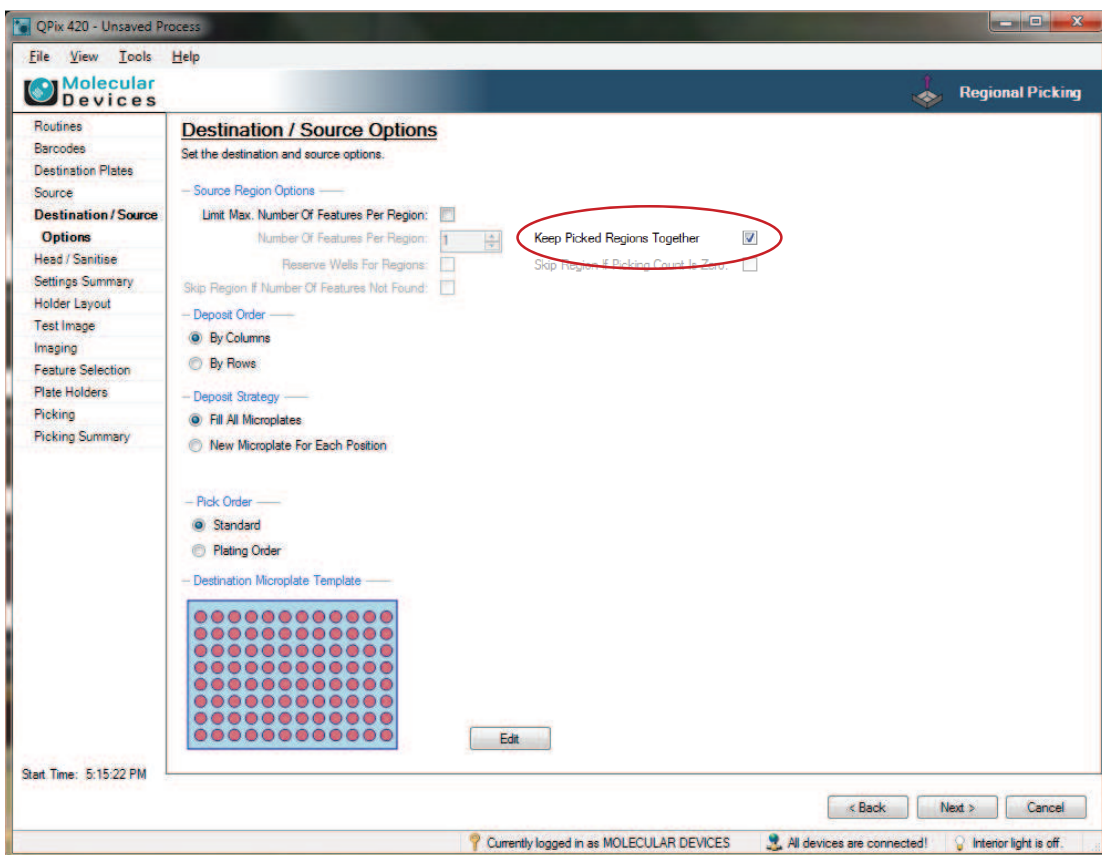
Keep Picked Colonies From the Same Region in the Same Destination Plate

A new feature has been added to have colonies that are picked from the same region delivered to the same destination plate.

Keeping Picked Colonies From the Same Region Together

You can set this option when defining destination and source options for Regional Picking.

1. In the **Destination/Source Options** window, select the **Keep Picked Regions Together** check box.



2. Make other desired selections in this window.
3. Click **Next** to continue.

Invert an Image or Subtract the Background

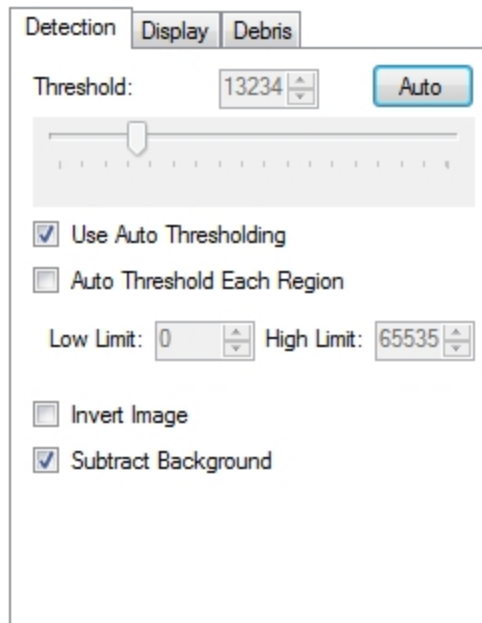
New features have been added to invert an image or subtract the background for Picking or Regional Picking. You can select these options in the **Test Image** or **WL Test Image** window during the Picking or Regional Picking operation.

- When you select to invert an image, the gray-scale values are switched making dark areas bright and bright areas dark. This feature is useful when trying to pick dark colonies such as plaques.
- When you select to subtract the background in an image, the background becomes nearly black. This feature is useful for images with very uneven background. Subtracting background can make images very dark.

Inverting an Image or Subtracting the Background

You can select these options after you create a white light test image for Picking or Regional Picking.

1. After loading the source, click **Next**. The instrument takes a white light test image of the source receptacle and the software displays the **Test Image**, or **WL Test Image**, window.
2. In the **Detection** section, select the **Invert Image** check box to make dark areas bright and bright areas dark.



3. Select the **Subtract Background** check box to have the background become nearly black.
4. Make other desired adjustments in this window.
5. Click **Next** to continue.

Specify the Number of Source Plates for Replicating

A new feature to specify the number of source plates for Replicating was added to the **Microplates/Sanitise** window.

Microplates

Select the microplates to use as source and destination, and the sanitise profile.

— Microplate Options —

Source Microplate: X6011 96 Well

Multi Dip Number of Dips: 1 Number Of Source Microplates: 1
 Stir Source

Destination Microplate: X6011 96 Well

Multi Dip Number of Dips: 1
 Stir Destination

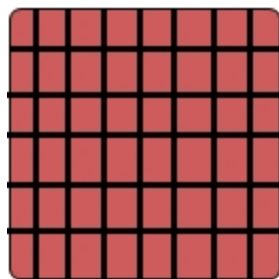
After selecting the **Source Microplate** for a Replicating routine, you can specify the number of source plates to process by typing a value in the **Number of Source Microplates** field.

Modifications Made to QPix 450/460 Software v1.5

The following modifications were made to QPix 450/460 Software version 1.5.

Rows and Columns Added to QTray Image

To help a user to better visualize the orientation of the rows and columns in a QTray, the image of the QTray has been enhanced in the **Source** window and **Settings Summary** window for Regional Picking setup and in the **Please Load Source** window for running a Regional Picking process.



The new image shows the orientation of a QTray as 6 rows and 8 columns.

Issues Addressed in QPix 450/460 Software v1.5

The following issues were addressed in QPix 450/460 Software version 1.5.

Saved Replicating Routine with Long-Pin Picking Head Fails to Run

Tracking ID: 3610

After loading a saved replicating routine that uses a long-pin picking head, clicking **Next** in the **Microplates** window generates an error message, instead of advancing to the **Head** window.

Resolution:

After loading a saved replicating routine that uses a long-pin picking head, clicking **Next** in the **Microplates** window is displayed the **Head** window.

Impact of fix:

This fix has no impact on current workflow or data.

One Row is Missing from an Exported Regional Picking Image

Tracking ID: 3745

Exporting a Regional Picking image of the full-tray by clicking the **Export** button generates an image that displays only 5 rows instead of 6.

Resolution:

The image dimensions were adjusted in the software so that now all 6 rows are displayed in the exported image.

Impact of fix:

This fix has no impact on current workflow or data.

Only One Source Microplate is Processed for Rearranging After Specifying to Process Multiple Microplates Before Depositing

Tracking ID: 3920

After specifying to process more than one source microplate before depositing in a rearranging routine, the instrument processes only one source microplate before depositing to the destination microplate.

Resolution:

After specifying to process more than one source microplate before depositing in a rearranging routine, the instrument processes the specified number of source microplates before depositing to the destination microplate.

Impact of fix:

This fix has no impact on current workflow or data.

Incorrect Column Headings in Exported Data File

Tracking ID: 3950

After exporting data, the resulting export file (.csv) has the columns labeled incorrectly.

Resolution:

The column headings in an export file now have the correct labels.

Impact of fix:

This fix has no impact on current workflow or data.

The Minimum Size Cannot be Revised Downward in a Saved Routine

Tracking ID: 4007

After defining the minimum size for picking and then saving a routine, when running the routine again, the minimum size cannot be decreased.



Note: By design, the minimum size cannot be smaller than the system-defined minimum size nor smaller than the diameter size defined in **Debris Discard** for the routine.

Resolution:

When running a saved routine with a defined minimum size, the minimum size can be revised both upward and downward within the permitted range.

Impact of fix:

This fix has no impact on current workflow or data.

Clicking Cancel Before a Process Starts Causes the Program to Become Unresponsive

Tracking ID: 4056

Before a process starts, clicking **Cancel** to stop the process causes the program to become unresponsive.

Resolution:

The **Cancel** button is now disabled until after the process starts.

Impact of fix:

This fix has no impact on current workflow or data.

An Error Condition Occurs During a Picking Routine with Multiple Destination Plates

Tracking ID: 4080

After selecting to fill multiple destination plates in a Picking routine, the software sometimes stops the routine with an error before completing the routine.

Resolution:

Picking routines with multiple destination plates complete successfully.

Impact of fix:

This fix has no impact on current workflow or data.

Full Destination Plates are Not Removed During a Multiple-Plate Rearranging Process

Tracking ID: 4188

During a multiple-plate rearranging process, full destination plates are not always removed causing some plates to receive multiple inoculations.

Resolution:

Full destination plates are always removed during a multiple-plate rearranging process.

Impact of fix:

This fix has no impact on current workflow or data.

A Regional Picking Routine Prematurely Cancels a Run if Multiple Wells are Reserved

Tracking ID: 4198

In Regional Picking, when the number of maximum features per region is set to 3 or 4 and reserve wells is enabled, if the number of colonies to pick is slightly less than 96, the routine ends before the run is complete.

Resolution:

Reserved wells are counted in the total number of wells letting the Regional Picking routine complete its run.

Impact of fix:

This fix has no impact on current workflow or data.

Running a Regional Picking Routine More Than Once Adds Empty Columns to the Feature Counts Table

Tracking ID: 4199

When a Regional Picking routine is run more than once in succession, empty columns are added to the Feature Counts table.

Resolution:

Running a Regional Picking routine multiple time no longer adds empty columns to the Feature Counts table.

Impact of fix:

This fix has no impact on current workflow or data.

Library Replication Routines Always Sanitise Between Copies

Tracking ID: 4322

When running a Library Replication routine making more than one copy of each source plate, the pins are always sanitised between the copies even if the **Sanitise Between Copies** check box is not selected for the routine.

Resolution:

If the **Sanitise Between Copies** check box is not selected for a Library Replication routine, then the pins are not sanitised between each copy.

Impact of fix:

This fix has no impact on current workflow or data.

Chapter 5: QPix 450/460 Software Version 1.4 Software Release Notes

The QPix 450/460 version 1.4 update is a minor release. The following is a summary of the changes incorporated in this revision as compared to version 1.1.151, the last general release of the software.

- [New in QPix 450/460 Software v1.4 on page 28](#)
- [Modifications Made to QPix 450/460 Software v1.4 on page 29](#)
- [Issues Addressed in QPix 450/460 Software v1.4 on page 31](#)

New in QPix 450/460 Software v1.4

The following new features are included in QPix 450/460 Software version 1.4.

Saving Raw Image Data

A new feature has been added to enable the storage of raw image frames from the Picking and Regional Picking processes. This feature stores the images as they are acquired by the camera before cropping, stitching, or processing takes place.

The raw images are stored in a predefined folder. Each image file is date and time-stamped. The folder also contains a configuration file named **config.txt**. If more than one is in use, a sub-folder for each receptacle is created.

For troubleshooting purposes, it is important that you send the complete folder to to let the images be successfully reprocessed and investigated.

Enabling the Saving of Raw Image Data



CAUTION! Molecular Devices recommends that only trained personnel configure these settings.

1. In the **Navigation** window of the software, click **Tools > Configuration**.
2. In the **Edit Configuration** dialog, double-click **Verbs**.
3. From the **Verbs** list under **BasicQPixVerb**, click **BasicQPix**.
4. In the list on the right, find the property named **StoreRawImages** and set it to **True**.
5. In the list on the right, find the property named **RawImageSavePath** and set the value to the path and folder where the raw images are to be saved.
The default path is **c:\qpix_raw**.
6. Click **Close**.
7. Close the **Edit Configuration** dialog by clicking the **X** in the upper-right corner.

Modifications Made to QPix 450/460 Software v1.4

The following modifications were made to QPix 450/460 Software version 1.4.

Removing Large Features in Regional Picking

To prevent detection of large non-colony items, such as the plastic divider in the QTray, the software has been modified to let large items be removed from the images before the final stages of processing. This enables the inner colonies of a region to be detected and pickable.

Enabling Large Feature Removal



CAUTION! Molecular Devices recommends that only trained personnel configure these settings.

1. In the **Navigation** window of the software, click **Tools > Configuration**.
2. In the **Edit Configuration** dialog, double-click **Verbs**.
3. From the **Verbs** list under **BasicQPixVerb**, click **BasicQPix**.
4. In the list on the right, find the property named **RemoveLargeItemsFromRegion** and set it to **True**.
5. In the list on the right, find the property named **LargeMinItemSize** and set the value to the required new size in pixels.



Note: The pixel size should be set to a value that is comfortably larger than the expected colonies.

6. Click **Close**.
7. Close the **Edit Configuration** dialog by clicking the **X** in the upper-right corner.

Selecting the Head for Sanitizing

To prevent pin damage and improve the efficiency of a **Sanitise** process, you can select the head that is installed on the system before running the **Sanitise** process.

To select the head for sanitizing and run a **Sanitise** process:

1. In the **Navigation** window of the software, double-click **Instrument Utilities**.
2. In the **Instrument Utilities** dialog, double-click **Sanitise**.
3. In the **Sanitise** window, from the **Select Head** list, select the head that is installed on the system.
4. Click **Select**.
5. From the **Sanitise Profile** list, select the profile you want to use.



Note: If you want a different wash cycle than those available in the list, cancel this process and create a new **Sanitise** profile.

6. Select either a **Fast** or **Slow** wash speed.
7. Click **Wash** to run the displayed wash cycle.
8. Click **Next** to return to the **Navigation** window.

Issues Addressed in QPix 450/460 Software v1.4

The following issues were addressed in QPix 450/460 Software version 1.4.

Halogen Heater Lamp Fails without Telling the User

Tracking ID: 3578

When one or more of the three halogen heater lamps fail, no failure message is displayed for the user.

Resolution:

A warning message now is displayed to notify the user that one or more lamps are not working.

Impact of fix:

This fix has no impact on current workflow or data.

During the Calibration Process, the Actuator Moves without Warning

Tracking ID: 3590

The calibration procedure must be completed with the door interlocks overridden. When you open the calibration module, the actuator moves slowly to the home position. After it homes, there is a pause as the software module loads. After the software module finished loading, the actuator moved unprompted and at full speed to the remove head position at the front of the instrument.



WARNING! Service or maintenance procedures other than those specified in this guide can be done only by Molecular Devices qualified personnel. When service is required, contact Molecular Devices technical support.

Resolution:

After the actuator moves to the home position, the software module loads. After the software module finishes loading, a message is displayed on the screen warning the operator that the actuator will move after clicking **OK**. After the operator clicks **OK**, the actuator moves slowly to the remove head position at the front of the instrument.

Impact of fix:

This fix adds an extra step to the calibration process, but otherwise has no impact on current workflow or data.

A QTray with Samples in Multiples of Eight Generates an Error During Plating and Streaking

Tracking ID: 3600

During Plating and Streaking the software generated a CommonPickAndPlaceManager error when the QTray contained samples in multiples of eight. The instrument done the Plating and Streaking operation correctly, but continued to look for extra plates to fill out the rest of the QTray.

Resolution:

The Plating and Streaking operation now completes without error when a QTray contains samples in multiples of eight.

Impact of fix:

This fix has no impact on current workflow or data.

The Selected Source Plate Type does not Persist in a Replication Routine

Tracking ID: 3602

After selecting a source plate type for a replicating routine and then saving and closing the routine, opening the routine again had the first plate type in the list selected instead of the previously selected source plate type.

Resolution:

The selected source plate type is saved with the replication routine, and remains selected after opening the saved routine again.

Impact of fix:

This fix has no impact on current workflow or data.

Rearranging Import Files With Empty Plates Does Not Work

Tracking ID: 3603

When opening a .csv formatted file with rearranging source plate data, the file must not contain empty plates. The import fails with the error message: "One of the well references in the import file is not in the specified wellplate. Import failed."

Resolution:

Rearranging source plate data with an imported .csv formatted file now permits plates with empty well references and purges them during the import process.

Impact of fix:

This fix has no impact on current workflow or data.

Exporting a Composite Image is Displayed as a Solid Black Bitmap

Tracking ID: 3712

When exporting a composite image, the result is displayed as a solid black bitmap.

Resolution:

Composite image exports are no longer displayed as solid black bitmaps.

Impact of fix:

This fix has no impact on current workflow or data.

Head is not Sanitised after Terminating a Picking Operation

Tracking ID: 3716

After pausing and then terminating a picking operation, there is no option to sanitise the head. This can leave colonies on the pins if some picking has previously occurred.

Resolution:

After pausing and then terminating a picking operation, if colonies have previously been picked, then a message is displayed giving users the option to sanitise the head.

Impact of fix:

This fix has no impact on current workflow or data.

During the Datuming Process, the Actuator Moves without Warning

Tracking ID: 4058

The Datuming procedure must be completed with the door interlocks overridden. When you open the Datuming module, the actuator moves slowly to the home position. After it homes, there is a pause as the software module loads. After the software module finished loading, the actuator moved unprompted and at full speed to the remove head position at the front of the instrument.



WARNING! Service or maintenance procedures other than those specified in this guide can be done only by Molecular Devices qualified personnel. When service is required, contact Molecular Devices technical support.

Resolution:

After the actuator moves to the home position, the software module loads. After the software module finishes loading, a message is displayed on the screen warning the operator that the actuator will move after clicking **OK**. After the operator clicks **OK**, the actuator moves slowly to the remove head position at the front of the instrument.

Impact of fix:

This fix adds an extra step to the Datuming process, but otherwise has no impact on current workflow or data.

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