

Firmware Upgrade Instructions

Notice: Your iCycler may or may not need a firmware upgrade. This upgrade CD is provided so that the latest functionality and report utilities are readily available for use. However, a firmware upgrade may be required in order to properly use a new accessory reaction module. Please consult the Bio-Rad website at www.bio-rad.com or your local Technical Support office for additional details.

Upgrading the Embedded Firmware

The firmware resident in the iCycler base must be upgraded to the latest version in order to ensure optimal functionality of the iCycler instrument. A recent version of the iCycler firmware and a related utility are contained on the CD provided with documentation. To complete the firmware upgrade of your instrument, follow the instructions below for copying the upgrade files from the CD to your computer prior to running the upgrade utility.

1. Connect the 9-pin serial cable from the serial port located at the rear of the iCycler instrument to either the COM1 or COM2 port on a Pentium-class computer.
2. Close any other application that may have already established communication with the iCycler base unit (for example, ICYCLER.EXE or the iCycler report utility software).
3. Use the Windows Explorer to create a new folder on the C: drive. Name this new folder "firmware upgrade".
4. Open the CD directory \base unit\firmware upgrade and copy the following files: UPGRADE.EXE and ICYCPROG.BIN to the "firmware upgrade" folder created in Step 3.
5. From Windows Explorer, open the "firmware upgrade" folder now located on the C: drive and double click on the UPGRADE.EXE. The utility will open and establish communication with the iCycler through the serial port connection.
6. Each new version of firmware is assigned a higher version number than the previous program. The UPGRADE.EXE utility will detect the version number of the installed firmware and display this information for comparison to the version ready for download. Download of a new firmware program will not proceed until the user enters "y" after reviewing the firmware version information.

The upgrade utility will display the following information:

Old program version: _____
New program version: _____
Proceed with download? y / n

Enter "y" to proceed with the download if the "New program version" is a HIGHER number than the "Old program version" before proceeding with download.

Enter "n" if the "New program version" is the same or LOWER than the "Old program version". Entering "n" will exit and close the UPGRADE.EXE utility.

7. Once the download is complete, the UPGRADE.EXE utility will display a message confirming that the upgrade has been successfully completed. The UPGRADE.EXE utility will automatically shut down and restart the iCycler instrument in order to complete the installation of the new firmware.

Reaction Module Installation Instructions

Removing or installing a new Reaction Module:

When removing or installing a reaction module, allow approximately 16" of height clearance from the bench surface.

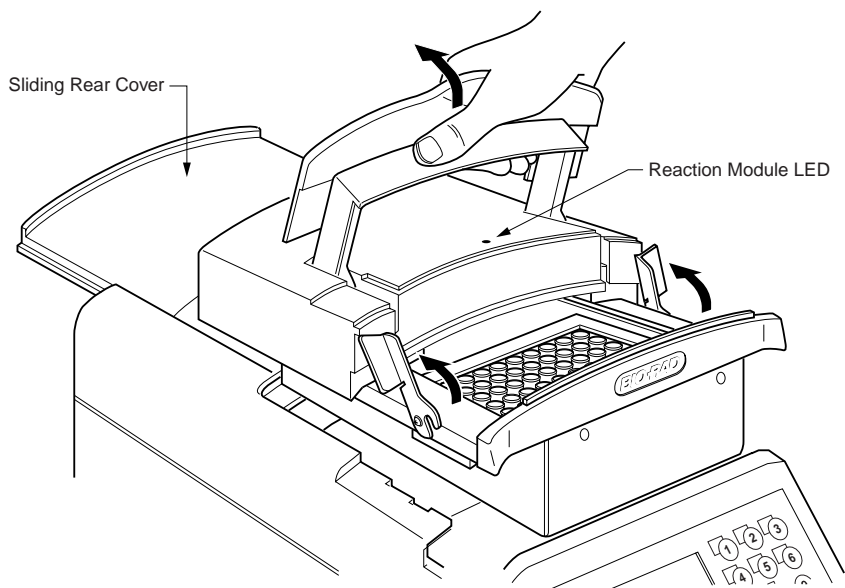
TO REMOVE A REACTION MODULE:

1. Lift the reaction module lid handle.
2. Slide the lid as far back as it will go.
3. Lift the green latches on either side of the reaction module and rotate the latches until they contact the lid as shown in the figure below.
4. Lift out the reaction module using the handle.

TO ATTACH A REACTION MODULE:

1. Set the reaction module on a flat surface.
2. Lift the reaction module lid handle and slide the lid as far back as possible.
3. Rotate the green latches until they contact the lid as shown in the figure below.
4. Lift the reaction module by the handle.
5. Insert reaction module into the iCycler base unit. Note that the front portion will engage before the rear.
6. Rotate the green latches down into their home position to clamp the reaction module in place.
7. Slide lid forward to close.

Note: The rear sliding cover should move forward with the lid. If the rear sliding cover does not move forward, remove and re-insert the reaction module.



Replacing a reaction module.