ImageXpress Pico Automated Cell Imaging System

Product Safety Sheet

This document describes the safe use of the ImageXpress® Pico Automated Cell Imaging System.

⚠ **WARNING! If the ImageXpress Pico instrument is used in a manner not specified by Molecular Devices, the protection provided by the equipment might be impaired.**

For complete details on installing and using the ImageXpress Pico system, review the documentation on the Molecular Devices Knowledge Base at support.moleculardevices.com.

The instrument must be installed on a level and stable surface.

The following safety symbols appear in this guide. Each symbol implies a particular amount of observation or recommended procedure as described:

⚠ **WARNING! A warning statement indicates a situation or operation that could cause personal injury if precautions are not followed. The warning symbol can vary depending on the hazard. The definition of the symbol is included in the text of the statement.**

⚠ CAUTION! A caution statement indicates a situation or operation that could cause damage to the instrument or loss of data if correct procedures are not followed.

Protective Housing

The ImageXpress Pico instrument features a protective outer housing, which is designed to protect you from exposure to LED light, hot surfaces, moving parts, and high voltage.

⚠ **WARNING! Do not manually open the top door, open the protective housing, or attempt to gain access to the interior of the instrument. These actions can damage the instrument components and result in hazardous exposure to LED light, hot surfaces, moving parts, or high voltage.**

Electrical Safety

To prevent electrical-related injuries and property damage, inspect all electrical equipment before use and immediately report all electrical deficiencies. Contact Molecular Devices Technical Support to service equipment that requires the removal of covers or panels.

⚠ **WARNING! The ImageXpress Pico system is an Equipment Class 1 product that relies on protective earth grounding for safe operation. Any interruption of the protective earth ground conductor—inside or outside the instrument—or disconnection of the protective earth ground terminal can result in personal injury.**

⚠ **WARNING! HIGH VOLTAGE. Within the instrument is the potential of an electrical shock hazard existing from a high-voltage source. Read and understand all safety instructions before you install, maintain, or service the instrument.**

Do not remove the instrument covers. To prevent electrical shock, use only the supplied power cords and connect the instrument to a properly grounded wall outlet.

To ensure sufficient ventilation and provide access for disconnecting power from the instrument, maintain a clearance of 20 cm to 30 cm (7.9 in. to 11.8 in.) at the rear of the instrument.

If the instrument does not power on, you may need to replace the instrument fuses.

Moving Parts Safety

The ImageXpress Pico instrument contains moving parts that can cause injury. Under normal conditions, the instrument is designed to protect you from these moving parts.

⚠ **WARNING! Do not attempt to access the interior of the instrument unless specifically instructed to do so by Molecular Devices Technical Support. The moving parts inside the instrument can cause injury. Do not operate the instrument with any covers or panels removed.**

Observe all warnings and cautions listed for all external devices attached to or in use during the operation of the instrument. See the applicable user guide for the operating and safety procedures of that device.

Lifting Hazard

⚠ **WARNING! LIFTING HAZARD. The ImageXpress Pico instrument weighs approximately 38 kg (84 lb). Use great care when lifting or moving the instrument. To prevent injury, use a minimum of two people to lift the instrument.**

⚠ CAUTION! Always lift the instrument to move it. Do not slide or push the instrument. Sliding or pushing can damage the feet on the bottom of the instrument.

⚠ CAUTION! Moving the instrument can damage sensitive parts and disrupt optical alignments. When transporting the instrument, use the original packaging and shipping box to properly secure the instrument. Your warranty does not cover problems caused during or as a result of shipment or relocation.

Chemical and Biological Safety

Normal operation of the ImageXpress Pico instrument can involve the use of materials that are toxic, flammable, or otherwise biologically harmful. When using such materials, observe the following precautions:

- Handle infectious samples based on good laboratory procedures and methods to prevent the spread of disease.
- Observe all cautionary information printed on the original containers of solutions before their use.
- Dispose of all waste solutions based on the waste disposal procedures of your facility. Operate the instrument in accordance with the instructions outlined in the documentation, and take all the required precautions when using pathological, toxic, or radioactive materials.
- Splashing of liquids can occur. When working with potentially hazardous liquids, take applicable safety precautions, such as wearing safety glasses and protective clothing.
- Use compressed gas supplies in a well-ventilated area. The instrument is not air-tight. Gas can escape into the atmosphere surrounding the instrument.
- Observe the applicable cautionary procedures as defined by your safety officer when using toxic, pathological, or radioactive materials or flammable solvents.

⚠ **WARNING! Never use the instrument in an environment where potentially damaging liquids or gases are present.**

MOLECULAR DEVICES

Environmental Control System

⚠ **WARNING! Do not operate the environmental control system with substances or under conditions that can cause a risk of explosion, implosion, or the release of gases.**

⚠ **WARNING! Use a compressed gas supply in a well-ventilated area. The instrument is not air-tight. Gas can escape into the atmosphere surrounding the instrument. When you use potentially toxic gas, observe the cautionary procedures defined by your safety officer to maintain a safe work environment, such as the use of an automatic warning system.**

⚠ **WARNING! Use only the compressed gases described in the documentation, which are CO_2, N_2, and compressed air. Never attempt to connect a pure O_2 tank or any other unsupported gas supply to the instrument.**

⚠ **WARNING! BIOHAZARD. You are responsible for decontaminating components of the instrument before you return parts to Molecular Devices for repair. Molecular Devices does not accept items that have not been decontaminated where it is applicable to do so. If parts are returned, they must be enclosed in a sealed plastic bag stating that the contents are safe to handle and are not contaminated. Before returning parts, contact Molecular Devices Technical Support if you have questions about decontamination.**

⚠ CAUTION! The environmental control system includes heated tubing that controls the temperature of the gas flow. Some accessible parts of the tubing and the humidifying column can reach temperatures of up to 50°C (122°F). Avoid touching the temperature-controlled parts of the system.

⚠ CAUTION! To prevent damage to the instrument, do not allow the gas pressure to exceed 1.2 bar (17.4 psi).

⚠ CAUTION! With multiple gas supplies, use the same gas pressure for each gas supply.

⚠ CAUTION! Do not use the instrument with hazardous substances.

⚠ CAUTION! If you use any substances or materials that pose a risk of infection, you are responsible for applying best practices when handling these materials.

⚠ CAUTION! If the CO_2 port or the N_2 port is not connected to a gas supply, use a blind plug (included) to close it off.

⚠ CAUTION! Do not connect or disconnect tubing when there is pressure from the gas cylinder.

Humidifying Column

⚠ CAUTION! Do not operate humidity level control if the water level in the humidifying column is below the minimum indicator. Operating without enough water can damage the instrument and the humidifying column.

⚠ CAUTION! Before and during an experiment with humidity level control, check the water level in the humidifying column and refill as needed. (Be aware that refilling the humidifying column during an experiment can reduce the humidity level for several minutes.)

⚠ CAUTION! Use only 18 Mohm•cm ultrapure water to fill the humidifying column.

⚠ CAUTION! It can be easy to accidentally overfill the humidifying column. When filling the humidifying column, use care not to fill beyond the maximum indicator.

⚠ CAUTION! Confirm that the rubber stopper is firmly seated in the humidifying column. A loose stopper can allow gas leakage and other environmental control system issues.

⚠ CAUTION! Before emptying the humidifying column, power off the instrument and disconnect all tubing/wiring. Trying to empty the humidifying column with the tubing/wiring connected can damage the instrument and the humidifying column.

Compressed Gas Supplies

⚠ **WARNING! Using an unsupported gas supply with to the environmental control system may damage the instrument and void the warranty. See the ImageXpress Pico User Guide for details on supported gases.**

⚠ **WARNING! Never connect pure O_2 or any other unspecified gas supply to the instrument.**

⚠ **WARNING! Hydrocarbons can contaminate the environmental control system and the instrument. If you supply compressed air from an air compressor, the air compressor must be oil-free. This feature is typically noted on the specification sheet from the supplier. Failure to supply oil-free air may damage the instrument and void the warranty.**

Contact Us

Web: www.moleculardevices.com
Email: info@moldev.com
Check our website for a current listing of worldwide distributors.

Regional Offices

USA and Canada	+1.800.635.5577	China	+86.400.821.3787	Japan	+81.3.6362.9109
UK and Europe*	00800.665.32860	Taiwan	+886.2.2656.7585	Korea	+82.2.3471.9531

**Austria, Belgium, Denmark, Finland, France, Germany, Iceland, Ireland, Luxembourg, Netherlands, Sweden, and Switzerland*

July 2021 5087154 A
Printed in USA