



# SpectraMax® i3x

Multi-Mode Detection Platform

## Installation Guide

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## Setting Up the SpectraMax® i3x Multi-Mode Detection Platform

Before you unpack and set up the SpectraMax i3x Multi-Mode Detection Platform, prepare a dry, flat work area that has sufficient space for the instrument, host computer, and required cables.



**Note:** If you use the SpectraMax® MiniMax™ 300 Imaging Cytometer, follow these instructions to unpack the microplate reader but do not remove the transport locks. See the SpectraMax MiniMax 300 Imaging Cytometer *Installation Guide* or SpectraMax i3x *Multi-Mode Detection Platform User Guide*.

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### Computer Integration

Each Molecular Devices microplate reader is shipped with a license key for the SoftMax® Pro Data Acquisition and Analysis Software that you install on the computer that you use to operate the instrument. The SoftMax Pro Software provides integrated instrument control, data display, and statistical data analysis.

You should install the SoftMax Pro Software on the computer before you set up the instrument. Please be aware that some updates to the SoftMax Pro Software require a purchase. Contact Molecular Devices before you update the software. To download the latest version of the software, visit:

<https://www.moleculardevices.com/products/microplate-readers/acquisition-and-analysis-software/softmax-pro-software#Order>.

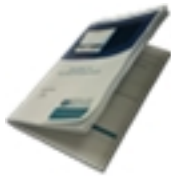





**Note:** For information about the computer specifications that are required to run the software, the software installation and licensing instructions, and the directions to create the software connection between the computer and the instrument, see the *SoftMax Pro Data Acquisition and Analysis Software Installation Guide*.

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The SpectraMax MiniMax 300 Imaging Cytometer is shipped with a computer that meets greater minimum computer system specifications than those required for the standard SoftMax Pro Software installation. You must install the **SoftMax Pro MiniMax Imaging Edition** of the SoftMax Pro Software on the supplied computer to operate the SpectraMax i3x with the SpectraMax MiniMax 300 Imaging Cytometer. Use of the SpectraMax MiniMax 300 Imaging Cytometer does not support the SoftMax Pro GxP Software edition.

## Package Contents

Illustration	Part Number	Description
	Latest version	SoftMax Pro Software installation guide with Product Key
	5025026	Installation guide
	YW 000 006	Hex key, 2.0 mm
	VZ 000 014	USB computer connection cable, 3 meter (9.8 foot)
	4400-0002 or 4400-0036	Power cord, 115V or Power cord, 230V

For a complete list of the contents of the package, see the enclosed packing list.



**Note:** Detection cartridges are shipped separately.

The SoftMax Pro Software installation places a copy of the available microplate reader user guides (.pdf) in the following location on the computer:

C:\ProgramData\Molecular Devices\User Guides

The most recent version of the microplate reader user guides and the *SoftMax Pro Data Acquisition and Analysis Software User Guide* are available on the Molecular Devices Knowledge Base:

In the software, select the **Home** tab, click **Contact Us**, and then select **Knowledge Base**.

Or go to [www.moleculardevices.com/service-support](http://www.moleculardevices.com/service-support).

## Unpacking the Instrument

The packaging is designed to protect the instrument during transportation. There are transport locks on the detection cartridge drawer and the plate drawer to protect the instrument from damage during shipping. You must remove the transport locks before you power on the instrument.



**WARNING! LIFTING HAZARD.** To prevent injury, use a minimum of two people to lift the instrument.

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**Note:** Retain the shipping box and all packaging materials for future transport needs. Do not use tools that can damage the packaging or the instrument.

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**CAUTION!** When transporting the instrument, warranty claims are void if improper packing results in damage to the instrument.

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To unpack the instrument:

1. Check the box for damage that occurred during transportation. Inform the supplier immediately and keep the damaged packaging.
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**CAUTION!** Keep the box upright. Do not tip or tilt the box or place it on its side.


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2. With the box facing up as indicated, cut open the side of the box labeled **Open Here**.

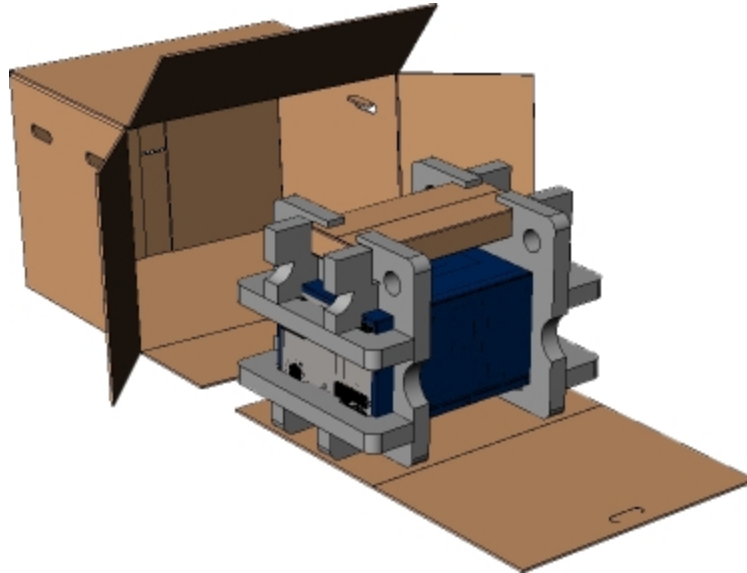


3. Grasp the handle on the cardboard and slide the instrument out of the box.

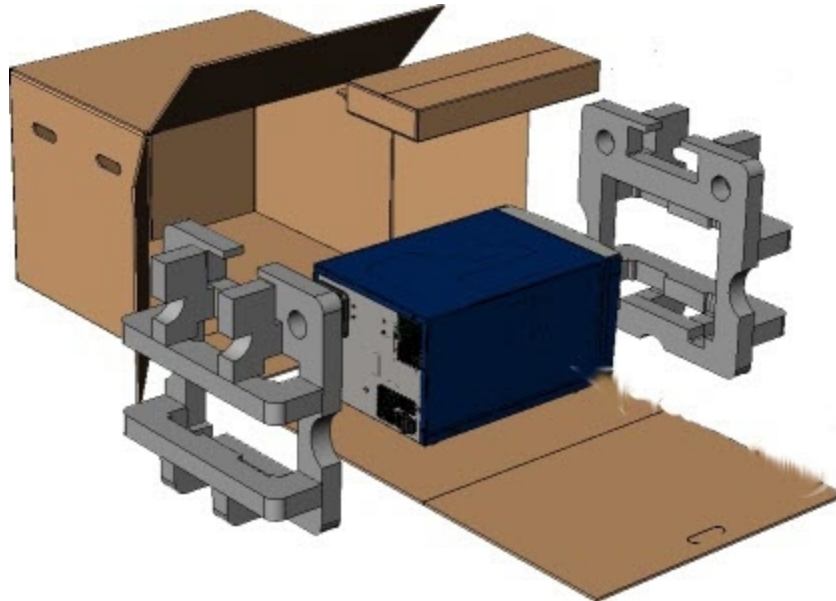
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 **Tip:** Have a second person hold the box in place while you slide the instrument out on the cardboard.

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4. Remove the accessories tool box.



5. Remove the foam packaging and the plastic bag.
6. With one person on each end, place the instrument on a dry, flat area.

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 **Note:** The feet are sticky and the instrument does not slide well. It can mark the work surface if slid.

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## Removing Transport Locks




**CAUTION!** The instrument can be damaged if you do not remove the transport locks before you power on the instrument.

There are transport locks on the detection cartridge drawer and the plate drawer to protect the instrument from damage during shipping. You must remove the transport locks before you power on the instrument.



**Note:** If you install the SpectraMax MiniMax 300 Imaging Cytometer, leave the transport locks in place until after you attach the cytometer to the microplate reader. See the installation guide or user guide.

### Required Tool

Illustration	Part Number	Description
	YW 000 006	2.0 mm hex key



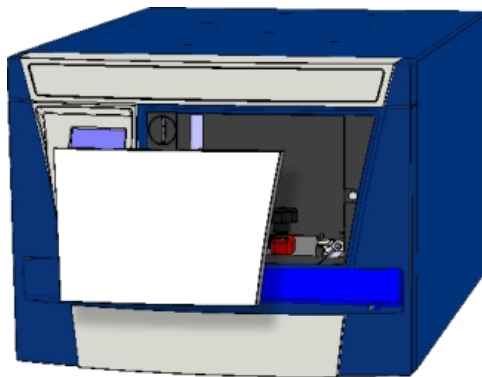
**CAUTION!** Do not touch or loosen screws or parts other than those specifically designated in the instructions. Doing so could cause misalignment and possibly void the warranty.



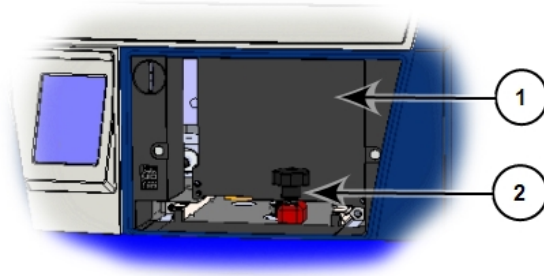
**CAUTION!** The front cover is held onto the front of the instrument by powerful magnets. Keep magnetic storage devices or strips, such as hard drives, key cards, and credit cards, away from the instrument covers.

To remove the transport locks:

1. Firmly pull on the front cover from the bottom to remove it. The front cover is held in place by magnets.



2. Turn the knob on the detection cartridge drawer transport lock counter-clockwise until it is free of the hole in the floor of the drawer compartment.



Item	Description
1	Detection cartridge drawer
2	Detection cartridge drawer transport lock

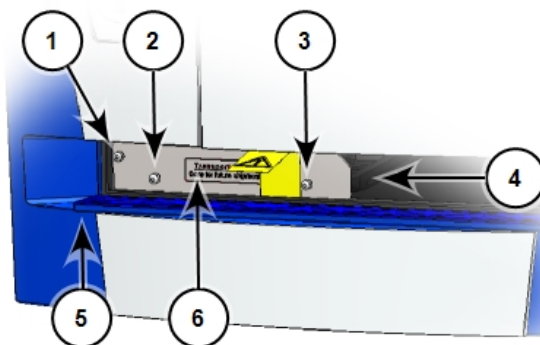
3. Slide the detection cartridge drawer forward until it is outside of the instrument.
4. Lower the detection cartridge drawer transport lock to remove it from the detection cartridge drawer. Store the transport lock in the accessories tool box.
5. Push the detection cartridge drawer back inside the instrument.
6. Align the magnets on the inside of the front cover with the magnets on the instrument base to replace the front cover.



- Gently pull the yellow tab that protrudes from the plate chamber door to open the door. Hold the door (5) open while you remove the transport lock.



**Note:** Do not tear the yellow tab. It remains attached to the transport lock to make it easier to open the plate chamber door.



Item	Description
1	Screw #1 fastens the lock to the internal frame of the instrument
2	Screw #2 fastens the lock to the plate drawer
3	Screw #3 fastens the lock to the plate drawer
4	Plate drawer
5	Plate chamber door in open position
6	Plate drawer transport lock

- Use the 2.0 mm hex key to loosen screw #1 in the upper-left corner of the transport lock until the lock disconnects from the instrument frame. The screw has a retaining washer to prevent removal from the lock.



**Tip:** After you loosen screw #1, pull the plate drawer slightly out of the instrument to hold the chamber door open.



- Loosen screws #2 and #3 until the lock comes free of the plate drawer and you can remove the lock from the instrument. The screws have retaining washers that prevent removal from the lock. Store the transport lock in the accessories tool box.
- Push the plate drawer back inside the instrument and close the chamber door.
- Save the carton, foam inserts, accessories tool box, and transport locks for future shipments.

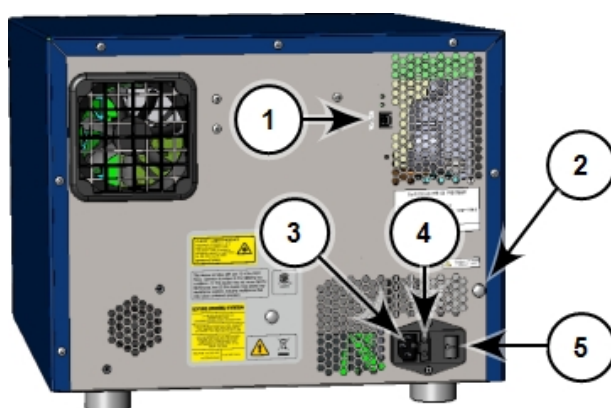
## Connecting Instrument Cables

The power cord and USB cable connect to the ports on the rear of the instrument.



**Note:** If you install the SpectraMax MiniMax 300 Imaging Cytometer, do not use this procedure. See the installation guide or user guide.

Illustration	Part Number	Description
	VZ 000 014	USB computer connection cable, 3 meter (9.8 foot)
	4400-0002 or 4400-0036	Power cord, 1 meter (3.3 foot)



Item	Description
1	USB port
2	Gas inlet quick connect fitting
3	Power port
4	Fuse carrier
5	Power switch

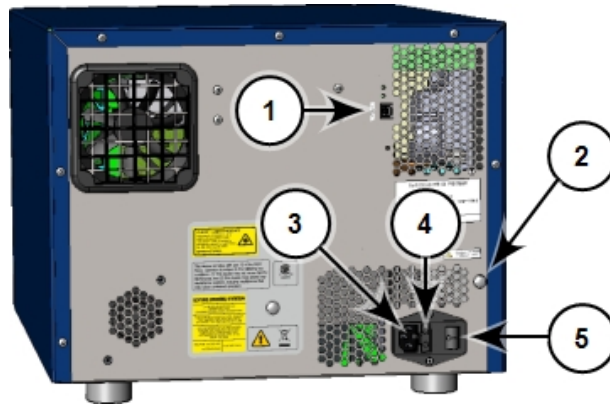
To connect the instrument cables:

1. Make sure that the power switch on the rear of the instrument is in the Off position.
2. Connect one end of the supplied USB cable to a USB ports on the computer and then connect the other end to the USB port (1) on the rear of the instrument.
3. Connect the supplied power cord to the power port on the rear of the instrument and then connect the other end of the power cord to a grounded electrical wall outlet.

## Connecting Gas Supply

You can connect a gas supply such as a CO<sub>2</sub>, nitrogen, or other gas supply to the instrument. The instrument and the SoftMax Pro Software do not regulate the gas supply.

Part Number	Description
Not available from Molecular Devices	Polyurethane tubing, outside diameter = 4.0 mm
Not applicable	Flat head screwdriver
S MS 135 100	Gas inlet unlock tool (not provided with the instrument)



Item	Description
1	USB port
2	Gas inlet quick connect fitting
3	Power port
4	Fuse carrier
5	Power switch



**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 your safety officer defines to maintain a safe work environment.

To connect a gas supply:

1. Power off the instrument.
2. Use a flat head screwdriver to pry off the small black cap on the rear of the instrument along the right edge to access the quick connect fitting. Save the cap for later use.
3. Connect one end of the tubing to the quick connect fitting and connect the other end to the gas supply.
4. Adjust the gas supply input pressure.



**Note:** For the maximum permitted air supply pressure for the gas inlet and polyurethane tubing specifications, see the user guide for the SpectraMax i3x.

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To disconnect the polyurethane tubing:

1. Power off the instrument.
2. Turn off the gas supply at the source and wait a sufficient time for the pressure to dissipate.
3. Use the gas inlet unlock tool to press the quick connect fitting and release the tubing.



**Note:** The gas inlet unlock tool is not supplied with the instrument.

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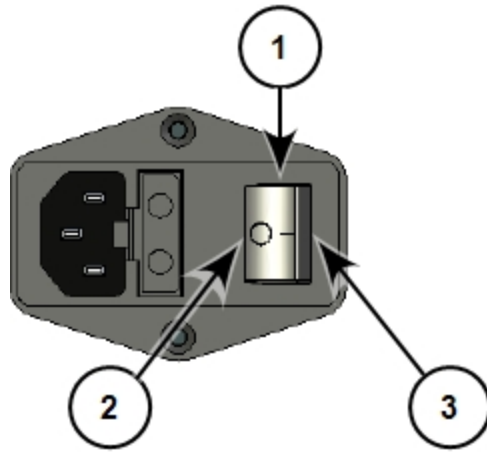
4. Remove the tubing from the quick connect fitting.
5. Replace the black cap over the quick connect fitting.

## Getting Started

Now that you installed the SoftMax Pro Software on the computer, unpacked the instrument, removed the transport locks, and connected the cables, it is time to get started. The power switch and power connection are on the rear of the instrument.

To ensure sufficient ventilation and provide access to disconnect power from the instrument, maintain a 20 cm to 30 cm (7.9 in. to 11.8 in.) gap between the rear of the instrument and the wall.

To turn the instrument on or off, press the power switch to place the rocker in the on or off position.



Item	Description
1	Power switch
2	Off
3	On

The SpectraMax MiniMax 300 Imaging Cytometer shares its power source with the SpectraMax i3x. To turn the cytometer on or off, use the power switch on the rear of the SpectraMax i3x.

Before you connect or disconnect the power cord, make sure that the power switch on the rear of the microplate reader is in the Off position.

After you power on the instrument you can start the SoftMax Pro Software and begin using the instrument.

## Contact Us

Phone: [+1-800-635-5577](tel:+1-800-635-5577)  
Web: [moleculardevices.com](http://moleculardevices.com)  
Email: [info@moldev.com](mailto:info@moldev.com)

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