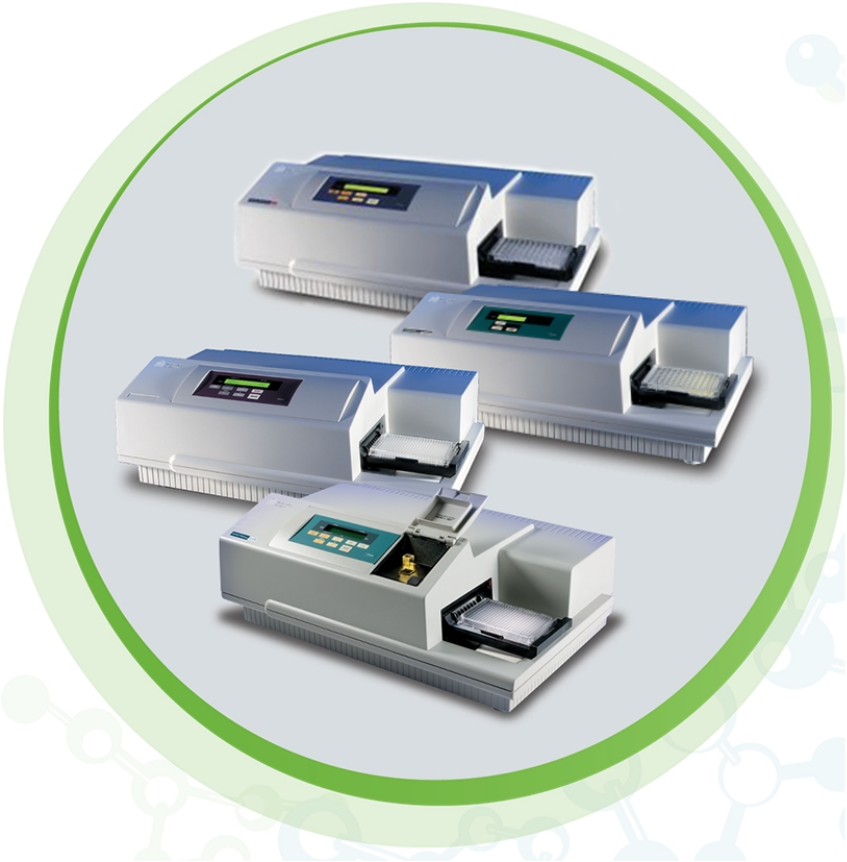

# SpectraMax 190
# SpectraMax 340PC384
# SpectraMax Plus 384
# VersaMax

## Microplate Spectrophotometers

## Installation Guide

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MOLECULAR DEVICES

Product manufactured by Molecular Devices, LLC.
3860 N. First Street, San Jose, California, 95134, United States of America.
Molecular Devices, LLC is ISO 9001 registered.

# Chapter 1: Introduction

The SpectraMax® 190 Microplate Spectrophotometer, SpectraMax® 340PC384 Microplate Spectrophotometer, and VersaMax™ Microplate Spectrophotometer provide rapid and sensitive measurements of a variety of analytes across a wide range of concentrations. The SpectraMax® Plus 384 Microplate Spectrophotometer adds the ability to read cuvettes. These instruments measure the optical density (OD) of samples at selected wavelengths in a single read mode.

- SpectraMax 190 reads 96-well plates.
- SpectraMax 340PC384 reads 96-well plates and 384-well plates.
- SpectraMax Plus 384 reads 96-well plates, 384-well plates, and cuvettes.
- VersaMax reads 96-well plates.

The high sensitivity and flexibility of these instruments make them useful for applications in the fields of biochemistry, cell biology, immunology, molecular biology, and microbiology.

Typical applications include ELISA, nucleic acid, protein, enzymatic type homogeneous and heterogeneous assays, microbial growth, endotoxin testing, and pipettor calibration.

The instruments support the UV and Visible Absorbance read mode with the following read types.

- Endpoint: at a single point in time.
- Kinetic: over a specified period of time.
- Spectrum: over a specified wavelength range.

The shake feature allows you to mix the contents of the wells in a plate before each read cycle, which makes it possible to perform kinetic analysis of solid-phase, enzyme-mediated reactions (shake is not critical for liquid-phase reactions).

Temperature controls allow the instrument to regulate the temperature of the plate chamber from 4°C above ambient to 45°C.

## Documentation

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

C:\ProgramData\Molecular Devices\User Guides

Use the following link for the most up-to-date microplate reader user guides on the Molecular Devices Knowledge Base:

Spectranet

To access the Knowledge Base from the software:

- Select the **Help** tab, click **Contact Us**, and then select **Knowledge Base**.

## Computer Integration

Each Molecular Devices microplate reader ships with a license key for the SoftMax® Pro Data Acquisition and Analysis Software. You install the SoftMax Pro Software on the computer that you use to operate the instrument to provide 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.

For information about the computer specifications 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:

- *SoftMax Pro Data Acquisition and Analysis Software - Standard Edition and MiniMax Imaging Edition - Installation Guide*
- *SoftMax Pro GxP Microplate Data Compliance Software System - Installation Guide for the Multi Computer Setup*
- *SoftMax Pro GxP Microplate Data Compliance Software System - Installation Guide for the Single Computer Setup*

# Chapter 2: Setting Up the Instrument

Before you unpack and set up the instrument, prepare a dry, flat work area that has sufficient space for the instrument, host computer, and required cables. To 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 ensure sufficient ventilation, do not block the ventilation grid on the right side of the instrument.

**WARNING! Potential lifting hazard. To prevent injury, use a minimum of two people to lift the instrument.**

The package contains the instrument and accessories to set up the instrument:

- SoftMax Pro Software product key information
- USB computer connection cable

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

The packaging is designed to protect the instrument during shipment. Tape is placed on the cuvette door and the plate drawer to protect the instrument from damage during shipment.

**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.

**Note:** Retain the shipping box and all packing materials for future transport needs.

**CAUTION!** When transporting the instrument, warranty claims are void if damage during transport is caused by improper packaging.

To unpack the instrument:

1. Check the box for damage that occurred during transportation. Inform the supplier immediately and keep the damaged packaging.
2. Open the top of the box.
3. Lift the accessories tool box and the instrument from the package and place the instrument on a level surface.
4. Remove the packing material from both ends of the instrument and set the instrument down carefully.

## Connecting Instrument Cables

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

| Illustration | Part Number | Description |
|---|---|---|
|  | 5064799 | USB computer connection cable, 3 meter (9.8 foot) |
|  | 4400-0002 or 4400-0036 | Power cord, 1 meter (3.3 foot) |

**Note:** Before you connect or disconnect the power cord, make sure that the power switch that is on the rear of the instrument is in the Off position.


1. Make sure that the power switch that is on the rear of the instrument is in the Off position.
2. To use a computer to operate the instrument, connect the appropriate end of the supplied USB cable to the USB port that is on the rear of the instrument, and then connect the other end to a USB port on the computer.
3. Connect the supplied power adapter to the power port that is on the rear of the instrument, and then connect the other end to a grounded electrical wall outlet.
4. Turn the instrument around so that the front of the instrument now faces you.

   **Note:** Ensure no cables run beneath the instrument.

5. Remove the tape from the cuvette door on the SpectraMax Plus 384.
6. Power on the instrument and wait for the plate drawer to open.
7. Remove the tape and protective covering from the drawer subplate.

## Getting Started

Now that you installed the SoftMax Pro Software on the computer, removed the tape from the drawer and the cuvette port, and connected the cables, it is time to get started.

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

1. Set the power switch on the rear of the instrument to the On position. Wait for the instrument to complete its diagnostic check and the plate drawer opens.
2. Start the software on the computer. To start the software under normal conditions, wait for the instrument to complete the start-up sequence, and then double-click the **SoftMax Pro Software** icon on the desktop to start the program.

Power off the instrument when not in use.

## 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 level of technical service.

Our Support website, support.moleculardevices.com, has a link to the Knowledge Base, which contains technical notes, software upgrades, safety data sheets, and other resources. If you still need assistance after consulting the Knowledge Base, you can submit a request to Molecular Devices Technical Support.

You can contact your local representative or Molecular Devices Technical Support at 800-635-5577 x 1815 (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.

**Contact Us**

Phone: +1-800-635-5577
Web: moleculardevices.com
Email: info@moldev.com

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