SpectraMax® ABS
SpectraMax® ABS Plus

Microplate Spectrophotometers

Installation Guide

MOLECULAR DEVICES

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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® ABS microplate spectrophotometer provides rapid and sensitive measurements of a variety of analytes across a wide range of concentrations. The SpectraMax® ABS Plus not only works on a wider range of (190 nm - 1000 nm) but it also adds the ability to read cuvettes. These instruments measure the optical density (OD) of samples at selected wavelengths in a single read mode.

The high sensitivity and flexibility of the instrument make it 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 SpectraMax® ABS supports the Visible Absorbance (ABS) read mode while the SpectraMax® ABS Plus supports the UV and Visible Absorbance (ABS) read mode with the following read types:

- Endpoint: At a single point in time.
- Kinetic: Over a specified period of time.
- Spectral Scan: Over a specified wavelength range.

The SpectraMax ABS reads 96-well plates.

The SpectraMax ABS Plus reads 96-well plates, 384-well plates, and cuvettes.

CAUTION! Although not recommended, you can also use strip well plates in both the SpectraMax ABS and the SpectraMax ABS Plus.

CAUTION! To prevent damage to the instrument, the height of the plate must not exceed 17 mm, including the lid if the plate is lidded.

CAUTION! Never touch the internal optic mirrors, lenses, filters, or cables. The optics are extremely delicate, and critical to the function of the instrument.

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*.

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 for disconnecting 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 grids on the front and rear of the instrument.

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

- SoftMax Pro Software, product key, and installation guide
- Instrument Installation Guide
- USB computer connection cable
- AC power adapter

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

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.

Install the SoftMax Pro Software on the computer that operates the microplate reader. See the *SoftMax Pro Data Acquisition and Analysis Software Installation Guide*.

The packaging is designed to protect the instrument during shipment. Tape is placed on the cuvette door 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 improper packaging results in damage during transport.

CAUTION! Before unpacking the instrument, check the box for damage that occurred during transportation. If any damage is noted, inform the supplier immediately and keep the damaged packaging. Unless instructed otherwise by the supplier, do not continue to unpack the instrument.

To unpack the instrument:

1. Open the top of the box.
2. Lift the accessories tool box and the instrument from the package, and then place the instrument on a level surface.
3. Remove the packing material from both ends of the instrument, remove the instrument from the plastic bag, and then set the instrument down carefully on a level surface.

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 ABS Plus.
6. Power on the instrument and wait for the plate drawer to open.

Chapter 3: Before You Move the Instrument

Before you move the instrument, make sure that the new location is a dry, flat work area that has sufficient space for the instrument, host computer, and required cables.

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

To minimize the possibility of damage during storage or shipment, you should pack the instrument in the original packaging materials. Correctly repacking the instrument includes following applicable decontamination procedures and packing instructions.

Note: If you must store the instrument, then store it in a dry, dust-free, environmentally controlled area.

Packing the Instrument

The original packaging is designed to protect the instrument during shipment.

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

To pack the instrument:

1. Make sure the plate drawer and cuvette chamber are empty.
2. Place tape to hold the cuvette chamber door closed.
3. Place the instrument back in the plastic bag.
4. Place the packing material on both ends of the instrument.
5. Place the instrument and the accessories tool box into the original instrument shipping box.
6. Seal the top of the box with packing tape.

Contact Us

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