

# SpectraDrop Micro-Volume Microplate Quick Start Guide

## Introduction

The SpectraDrop Microplate (formerly  $\mu$ Max) uses sample slides that can be reused or replaced to enable micro-volume measurements in compatible Molecular Devices® microplate readers.

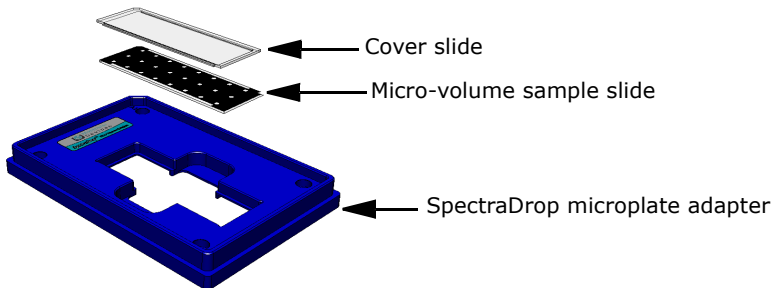
The contents of the SpectraDrop Microplate kit depend on kit type.

Description	Details
SpectraDrop Starter Kit	Contains one microplate adapter, two 24-well micro-volume bottom slides, and one of each cover slide (2 $\mu$ L and 4 $\mu$ L)
SpectraDrop High Throughput Screening (HTS) Kit	Contains one microplate adapter, five 24-well micro-volume bottom slides, five 64-well micro-volume bottom slides, and five of each cover slide (2 $\mu$ L and 4 $\mu$ L)

This guide gives basic procedures to help you prepare and use the SpectraDrop Microplate.

## Preparing a SpectraDrop Microplate for a Measurement

For any measurement, the SpectraDrop Microplate uses the microplate adapter, a micro-volume slide, and a cover slide (Figure 1-1).



**Figure 1-1** Required SpectraDrop Microplate parts

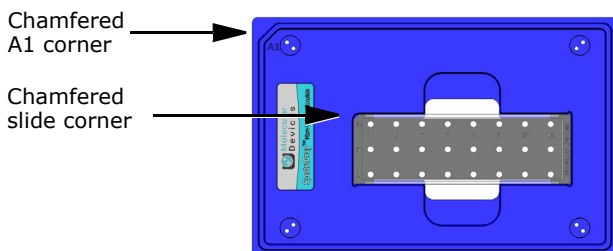
### To prepare a SpectraDrop Microplate for a measurement:

1. Insert a clean micro-volume slide into the slide seat of the plate adapter, matching the chamfered corners of the slide and the A1 corner of the plate adapter (Figure 1-2).



**Note:** The micro-volume slide sits flat in the adapter when inserted properly.

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**Figure 1-2** Match chamfered corners of slide and adapter

2. Pipette your sample solution onto the micro-volume slide in the marked well positions.  
The pipette volume corresponds to the cover slide.
  - ◆ Use 2  $\mu$ l solution volume with the clear colored 0.5 mm path length cover slide.
  - ◆ Use 4  $\mu$ l solution volume with the blue colored 1.0 mm path length cover slide.
3. Place a cover slide on top of the micro-volume slide with the path length strips facing down (0.5 mm or 1.0 mm path length).
4. Place the plate adapter into the open microplate drawer of your microplate reader with the chamfered corner in the A1 position.
5. Close the microplate drawer of the microplate reader, and run an experiment.

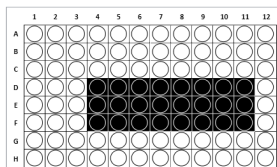
## Running a Micro-Volume Experiment

The following section describes how to run a micro-volume experiment using SoftMax® Pro Software and a compatible microplate reader. For specific procedures, refer to the documentation for your microplate reader and SoftMax Pro Software.

### To perform a micro-volume experiment:

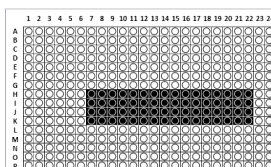
1. Select a SpectraDrop, or MicroMax in older software, protocol, from the Protocol Library or Protocol home page.
2. Edit and save the protocol as required for your experiment.
3. Run your experiment.

If you have to manually align a micro-volume slide, refer to the following details ([Figure 1-3](#) and [Figure 1-4](#)):



96-well microplate compatible  
Well read area range: D4 to F11

**Figure 1-3** 24-Well Micro-Volume Sample Slide



384-well microplate compatible  
Well read area range: H7 to K22

**Figure 1-4** 64-Well Micro-Volume Sample Slide

## Approved Sample Slide Cleaning Methods

Molecular Devices recommends cleaning the sample slides and the cover slides using the following methods in order of preference:

1. Dry wipe clean using a lab wipe tissue.
2. Wet wipe clean using a lab wipe tissue and water or organic solvent such as acetone, methanol, or ethanol. Avoid using strong acids or alkali solvents because they will damage the slide mask.
3. Autoclave.

## Ordering Information

Contact your Molecular Devices Sales Representative to order the following replacement parts.

Part Number	Description	Details
0200-6262	SpectraDrop Starter Kit	Contains one microplate adapter, two 24-well micro-volume bottom slide, and one of each cover slide (2 $\mu$ L and 4 $\mu$ L)
0200-6267	SpectraDrop High Throughput Screening (HTS) Kit	Contains one microplate adapter, five 24-well micro-volume bottom slides, five 64-well micro-volume bottom slides, and five of each cover slide (2 $\mu$ L and 4 $\mu$ L)
0200-6263	SpectraDrop Micro-Volume Refills, 24-Well Bottom Slides	Three micro-volume 24-well bottom slides
0200-6264	SpectraDrop Micro-Volume Refills, 64-Well Bottom Slides	Three micro-volume 64-well bottom slides
0200-6265	SpectraDrop Micro-Volume Refills, 2 $\mu$ L Cover Slides	Three 2 $\mu$ L top slides (0.5 mm clear path length)
0200-6266	SpectraDrop Micro-Volume Refills, 4 $\mu$ L Cover Slides	Three 4 $\mu$ L top slides (1.0 mm blue path length)

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