

# 96-Channel Pipette

1000  $\mu$ L

The Opentrons Flex 96-Channel Pipette is an electronic pipette designed for the Opentrons Flex liquid handling robot. This guide describes the pipette's features, including basic installation, using tip rack adapters, maintenance, and warranty information.



## Pipette Capacity

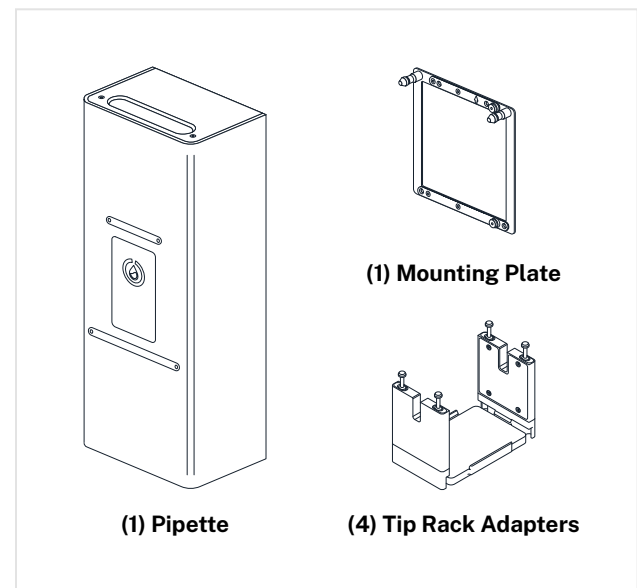
Flex 96-channel pipettes are available in a single size. The minimum/maximum volumetric capacity is 5–1000  $\mu$ L.

## Tip Compatibility

Flex pipettes are optimized for use with Flex 50  $\mu$ L, 200  $\mu$ L, and 1000  $\mu$ L pipette tips. Flex pipettes are *not* recommended for use with Opentrons OT-2 pipette tips or tips from other manufacturers. Tip racks must be placed in an included adapter when picking up 96 tips simultaneously. For more information, see the System Description and Labware chapters in the Flex instruction manual.

You can buy Flex tips here: <https://shop.opentrons.com>.

## Box Contents



## Tip Rack Adapters

The 96-channel pipette ships with four tip rack adapters. These are aluminum brackets that you place on the deck. They hold tip racks for the 96-channel pipette. The adapter accepts Flex 50 µL, 200 µL, and 1000 µL tip racks.

The 96-channel pipette requires an adapter when picking up 96 tips simultaneously. The pipette moves over the adapter, lowers itself onto the mounting pins, and attaches tips to the nozzles by pulling the adapter and tip rack upward.

Do not use a tip rack adapter when picking up fewer than 96 tips.



**Warning:** Pinch point hazard. Keep hands away from the pipette and tip rack adapter during tip attachment.

### SOFTWARE CONTROLS

The tip rack adapter is available in Labware Library, Protocol Designer, and the Python Protocol API. Load it in your protocols as needed. You can use the gripper to place a fresh tip rack on the adapter or to remove a used tip rack from the adapter.

## Installation and Maintenance

Information about pipette installation and care.



**Note:** Remove the protective cover from the bottom of the pipette before installation.

### ATTACH

Instructions on the touchscreen, or in the Opentrons App, will guide you through the installation process. On the touchscreen, tap **Instruments** and then tap an empty mount.



**Note:** The 96-channel pipette weighs ~10 kg. Ask a lab partner to help you install it. It can be difficult to attach on your own.

To attach your pipette:

1. Clear the deck area so it is free from obstructions. The gantry will move during the installation process.
2. Remove any 1- or 8-channel pipettes, if attached. The 96-channel pipette requires both pipette mounts.
3. Loosen the captive screw on the top right of the pipette carriage. This releases the right pipette mount. Refer to the touchscreen or app for detailed instructions.
4. Attach the mounting plate. Manually adjust the right pipette mount up or down, as needed, to align the plate to both mounts.
5. Attach the pipette and secure it by tightening the four 2.5 mm mounting screws. These are captive screws recessed into holes located on the front of the pipette. Hold the pipette while tightening the screws.

### CALIBRATE

The pipette requires calibration before use. Instructions on the touchscreen, or in the Opentrons App, will guide you through the calibration process. To calibrate your pipette:

1. Clear the deck area so it is free from obstructions. The gantry and pipette will move during calibration.
2. Attach the calibration probe to the A1 (back left corner) pipette nozzle and start the automated calibration procedure.
3. Remove and store the probe when calibration is complete. Your pipette is ready for use.

### CLEAN

Clean the outside of the pipette and tip rack adapter with a soft cloth and isopropyl alcohol or ethyl alcohol. Do not use acetone or other aggressive solvents. For information about cleaning and decontamination, scan the QR code or search for “Flex pipette cleaning” on [support.opentrons.com](https://support.opentrons.com).



## Warranty

All hardware purchased from Opentrons is covered under a 1-year standard warranty. Opentrons warrants to the end-user of the products that they will be free of manufacturing defects due to part quality issues or poor workmanship and also warrants that the products will materially conform to Opentrons' published specifications.

## Support

Opentrons Support can help you with questions about our products and services. If you discover a defect, or believe your product is not functioning to published specifications, contact us at [support.opentrons.com](https://support.opentrons.com).

Please have the pipette's serial number available when contacting support. You can find the serial number on the back of the pipette or via the touchscreen (tap **Instruments** and tap the pipette name).



© OPENTRONS 2023

Opentrons Flex™ (Opentrons Labworks, Inc.)

Registered names, trademarks, etc. used in this document, even when not specifically marked as such, are not to be considered unprotected by law.