

opentrons GEN1 Heater Shaker Module User Guide

Home » opentrons opentrons GEN1 Heater Shaker Module User Guide 🖺



Contents

- 1 Important! Read This First
- **2 Product Elements**
- **3 Product Elements**
- **4 Setup Instructions**
- **5 Resources**
- **6 SUPPORT**
- 7 Warranty
- 8 Product and Manufacturer Description
- 9 Documents / Resources
 - 9.1 References
- **10 Related Posts**

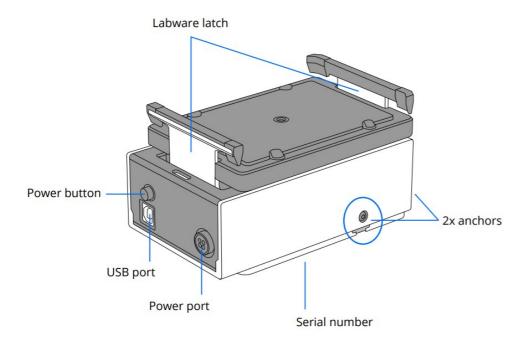
The shaking motion of the Heater-Shaker Module requires **additional anchoring** — more than simply clipping it into a deck slot — to ensure that it does not dislodge itself from the deck of your robot. See the "Attaching to deck" section of this Quickstart Guide or the on-screen instructions in the Opentrons App for details on how to anchor the module.

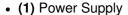
Product Elements

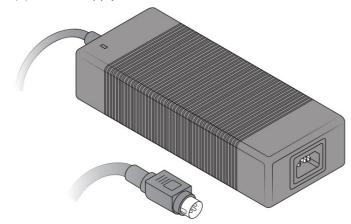
INCLUDED BOX CONTENTS / PARTS & ACCESSORIES

- (1) Power Supply
- (1) Power Cable
- (1) USB Cable
- (1) T10 Torx Screwdriver
- (1) T10 Torx L Key
- (1) M3x7 Thermal Adapter Screw (plus spares)

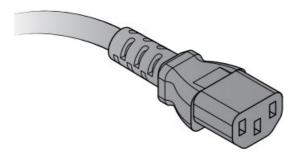
Product Elements



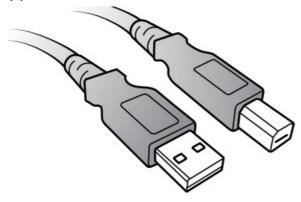




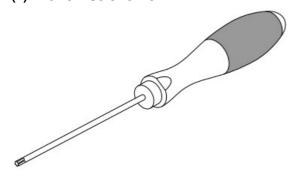
• (1) Power Cable



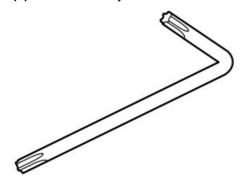
• (1) USB Cable



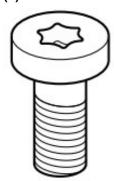
• (1) T10 Torx Screwdriver



• (1) T10 Torx L Key

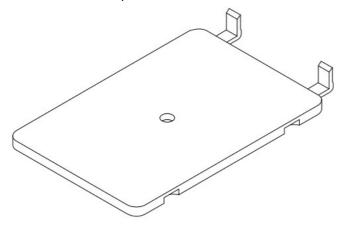


• (1) M3x7 Thermal Adapter Screw (plus spares)

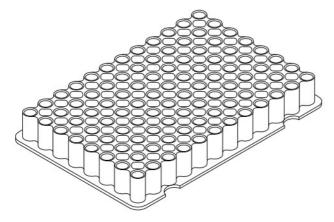


A compatible thermal adapter is required for adding labware to the Heater-Shaker Module. Adapters can be purchased directly from Opentrons at https://shop.opentrons.com.

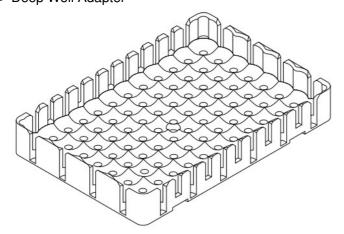
• Universal Flat Adapter



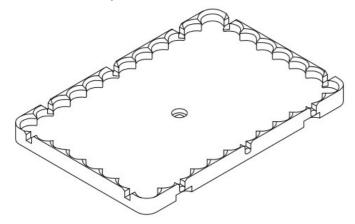
• PCR Adapter



• Deep Well Adapter



• Flat Bottom Adapter



Setup Instructions

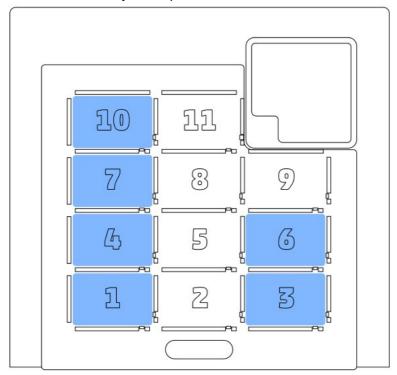
PREPARING THE MODULE

Orient the module so its power ports face away from you.

Make sure the anchors are not extended and are level with the module's base. Turn the screws above each anchor counterclockwise to retract the anchors. The screws should **not** come out of the module.

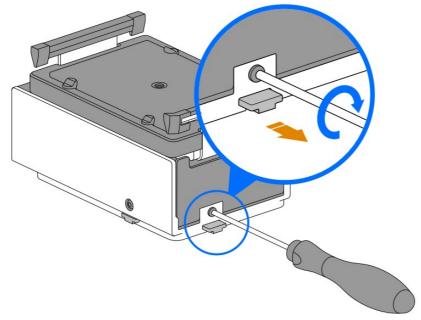
ATTACHING TO DECK

Choose which slot you will place the Heater-Shaker Module in. Slots 1, 3, 4, 6, 7, and 10 are supported.



Place the module in the slot such that the power and USB ports are facing outward, i.e. to the left in slot 1, 4, 7, or 10; to the right in slot 3 or 6.

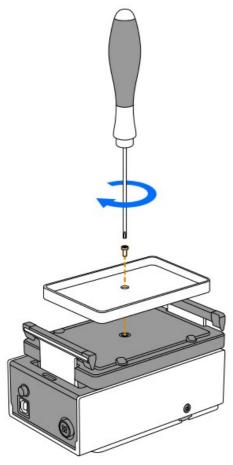
Hold the module flat against the deck and turn the screws clockwise to extend the anchors.



Check that the module is firmly attached by gently pulling up on it and rocking it from side to side.

ATTACHING A THERMAL ADAPTER

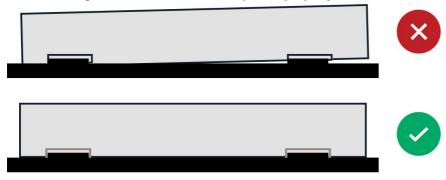
Use the included T10 Torx Screwdriver and Thermal Adapter Screw to attach your chosen adapter to the module.



IMPORTANT:

Using a different screwdriver can strip the screw. Using a different screw can damage the module.

Check the alignment of the thermal adapter. If properly attached, it will sit evenly on the module.



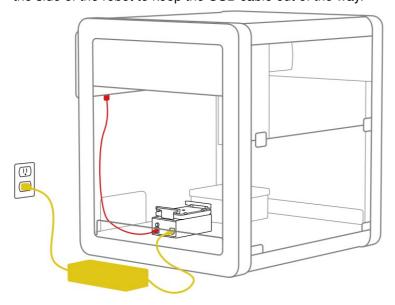
Check that the adapter is firmly attached by rocking it back and forth.

CONNECTING USB & POWER

The module requires two connections:

1. Connect the power cable to the power supply and the module. Route the cable through the gap at the bottom of the robot's side window.

2. Connect the USB cable to the module and an open USB port at the back of the robot. Use the cable holders on the side of the robot to keep the USB cable out of the way.



Power on the robot and launch the Opentrons App.

If you successfully connected your module, it will appear in the **Pipettes and Modules** section on your robot's device detail page. From there you can control the module's labware latch or run a test shake.

Resources

MAINTENANCE

The Heater-Shaker Module has been tested for 3 years of full-time operation without maintenance. Users should not attempt to service or repair the module themselves. If you have concerns about your module's performance or require maintenance, please contact Opentrons Support.

SUPPORT

Opentrons Help Center

Answers to many common questions are available on the Opentrons Help Center at https://opentrons.com/support.

Contact Opentrons

If you have any other questions, contact support@opentrons.com. Please have the serial numbers of your module and robot available when contacting Opentrons Support.

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.

APP DOWNLOAD

Control your liquid handling robot and module using the Opentrons App. Download the app for Windows, macOS, or Ubuntu at https://opentrons.com/ot-app/.

In-app setup guide

For interactive setup instructions and to run a test shake with your Heater-Shaker Module, connect the module to your robot (see

"Connecting USB & power" above) and either:

- Go to the Pipettes and Modules section on the robot's device detail page, or
- Load a protocol that requires the module and go to Step 2: Module Setup in the Setup tab of the protocol run page.

Product and Manufacturer Description

PRODUCT DESCRIPTION

The Opentrons Heater-Shaker Module provides on-deck heating and orbital shaking. The module can be heated to 95 °C, and can shake samples from 200 to 3000 rpm.

Completed Certifications

IEC, FCC, RoHS

Recommended Operating Conditions

Environmental temperature: 20–25 °C Environmental humidity: 80% maximum

MANUFACTURER DESCRIPTION

Opentrons Labworks Inc 45-18 Ct Square W Long Island City, NY 11101

For a PDF of the complete **OpentronsHeater-Shaker Module GEN1 Instruction Manual**, scan this QR code:



GEN1, August 2022



Documents / Resources



<u>opentrons GEN1 Heater Shaker Module</u> [pdf] User Guide GEN1, GEN1 Heater Shaker Module, Heater Shaker Module, Shaker Module, Module

References

- Opentrons App Opentrons
- Opentrons | Lab Automation | Lab Robots for Life Scientists
- **Opentrons App Opentrons**
- Opentrons Automated Pipetting Robots for Life Science Labs

Manuals+,