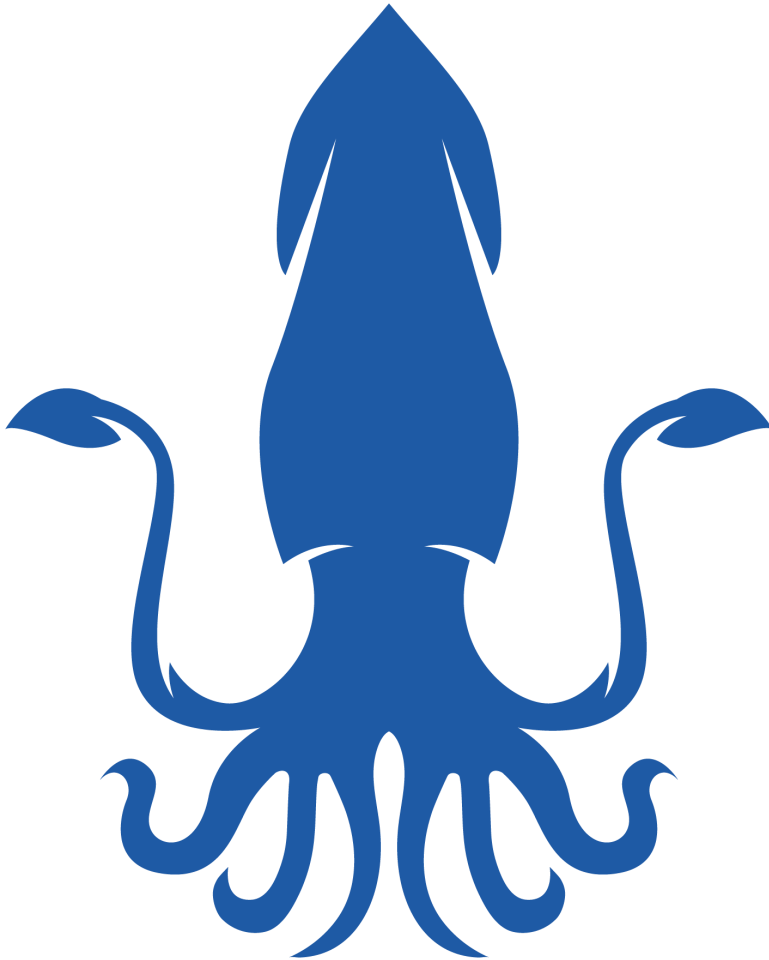




Squid Desktop

User Guide

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1. Installation

Squid Desktop opens in a fixed 1250 × 800 window so that the protocol editor always has room for the full workflow. The window can be moved but not resized, and its position is remembered between sessions.

Visit denovix.com/squid-desktop for download and installation instructions.

2. Connecting Devices

Connect a Device(s) via Bluetooth®

New Device

1. Open the menu  on the Squid, then “Device Settings.”
2. Select the “Bluetooth” option to turn it “ON”
3. In Squid Desktop, click “Find Squid Devices”
4. After the device appears, click “Connect”

Previously Connected Devices

1. Turn on Bluetooth® on the device as described above
2. On Squid Desktop, click “Bluetooth” on the device card

Connect a Device via USB

1. Use a data-capable USB-C cable to connect the Squid to the device with Squid Desktop installed
2. The Squid will automatically connect

Device Tab

- **Settings:** Edit device name, enter Wi-Fi password, or choose theme color
- **Protocols (USB only):** View and edit custom protocols on the device, or copy device protocols to the Desktop Protocol Library
- **Calibration:** Calibrate the device and save / export calibration certificates

3. Custom Protocols

Build a New Protocol

1. Click "Protocol Library," then "+ New Protocol"
2. Enter a name (required) and description (optional)
3. Click to add steps from the Workflow Builder
 - a. **Tip Select:** Sets the tip size for the steps that follow (required as first step)
 - b. **Aspirate:** Draws a specific volume liquid into the tip
 - c. **Air Gap:** Draws air into the tip, typically to separate liquid volumes
 - d. **Dispense:** Expels a specific volume from the tip
 - e. **Purge:** Expels everything remaining in the tip
 - f. **Mix:** Aspirates and dispenses a volume for a determined number of cycles
 - g. **Repeat:** Aspirates once, then dispenses for a determined number of aliquots
 - h. **Loop:** Repeats the inner steps nested inside
4. Configure parameters for each step (e.g. speed, volumes, cycles, extra volumes) as desired
5. The software will continuously validate the protocol to check for errors
 - a. The bottom right corner will display whether the protocol is "Valid" or "Invalid." Progress will save automatically, but only Valid protocols are able to be transferred to Squids.
 - b. Red error messages will display to notify users of issues
6. Simulate the protocol using "Run Protocol" in the "Real-Time Sim" panel
7. Click "Back to Library" when finished

Edit a Protocol

1. Select a protocol from the Protocol Library or the "Protocols" section in the Device tab
2. Click "Edit" and make the desired changes, or "Duplicate" to create a copy
3. Save the protocol to update it in the Protocol Library
4. Click "Transfer" to update the protocol on the Squid

Transfer a Custom Protocol to a Squid

1. Ensure that a Squid is connected
2. In the Protocol Library, click "Transfer" on the desired protocol. A "Sent" confirmation message will appear when the transfer is complete.
3. Navigate to the "Custom Protocols" list on the Squid to view and run the protocol

Share a Custom Protocol Between Computers

1. In the overflow menu or the Custom Protocol Builder, click “Export Protocol” to save a .spl (Squid Protocol Language) plain text file
2. Send the .spl file to another computer
3. On the second computer, click “Import Protocol” in the top right of the Protocol Library
4. Select .spl file, and the protocol will be added to the Protocol Library

Share a Custom Protocol Between Squid Devices

1. Turn on Bluetooth® on the receiving device.
2. Select an existing Custom Protocol from the sending device’s list.
3. Select “Share” to scan for devices, then select the name of the device you would like to send the protocol to.
 - a. If no devices are found, check the Device Settings on the receiving device to ensure that Bluetooth® is still on. Bluetooth® pairing will switch off after 60 seconds if a connection is not established to preserve battery power.
4. Once the sending device completes the transfer, the protocol will be available in the receiving device’s Custom Protocol list.

4. Calibration

The Calibration section in the Device tab records a gravimetric calibration for a connected pipette, computes the correction coefficients from your balance readings, and writes them to the device.

1. Record the environmental conditions
2. Choose a tip mode to calibrate
 - a. **Small Tip Mode:** 1 - 200 μL
 - b. **Large Tip Mode:** 100 - 1000 μL
3. For each target volume, dispense the replicates on a gravimetric scale and record the value. Enter the values into the Squid Desktop Calibration section.
4. After measurements are complete, click “Save & Send to Device” to store the new calibration values on the pipette
5. Click “Export Certificate” to download a PDF

5. Squid Desktop Settings

- Click the gear icon  in the bottom right to open Settings
- View the current software version, related user guides, and available software updates
- If a new software version is available, click “Update” to install and restart the software

6. Troubleshooting

Problem	Solution
No devices found	Confirm that the pipette is powered on and that Bluetooth® is enabled. If the device does not find a connection in 60 seconds, Bluetooth® will turn off.
“Bluetooth is Off” appears on the Squid	Ensure that Bluetooth® is enabled on the computer.
USB-C is connected, but no Squid appears on Desktop	The USB-C cable may be a charging only cable, not a data cable. Ensure that a data compatible cable is used.
Transfer button is grayed out	Either no pipette is connected, or the protocol is not valid. Ensure that a device is connected and that all protocol errors are addressed.
macOS: Squid devices never appear via Bluetooth®	Grant Squid Desktop Bluetooth® permissions under System Settings > Privacy & Security > Bluetooth, then relaunch Squid Desktop.

7. Customer Support

DeNovix Inc.

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Wilmington, DE USA 19810

302-442-6911

Technical Support Email: techsupport@denovix.com

Please include the serial number and software version of your pipette and Squid Desktop when contacting Customer Support by email. This information may be found in the About screen on the main menu.

Outside of the US, please contact your local distributor for assistance.

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