

## SVALT Cooling Dock

# Dx / D2n / D2 / D1 Cooling System User Removal and Installation Guide

The following document provides a step-by-step process for removing an existing cooling system and installing a new cooling system into a Cooling Dock Pro. Removing and/or installing a DxRED / D1 cooling system can be completed quickly in a few minutes, while removing and/or installing a DxBLK / D2n / D2 cooling system requires additional time to handle the thermistor and additional care to fit the cooling system into place. If questions or problems arise during the installation, please email [support@svalt.com](mailto:support@svalt.com) and a response will be provided as quickly as possible.



### Contents

- Dx / D2n / D2 / D1 assembled cooling system.
- Hex drive for removing and installing cooling systems.
- Replacement top right pads without thermistor hole for DxRED and D1 cooling system install, and top right pads with a thermistor hole and foam thermistor alignment plug for DxBLK / D2n / D2 cooling systems.

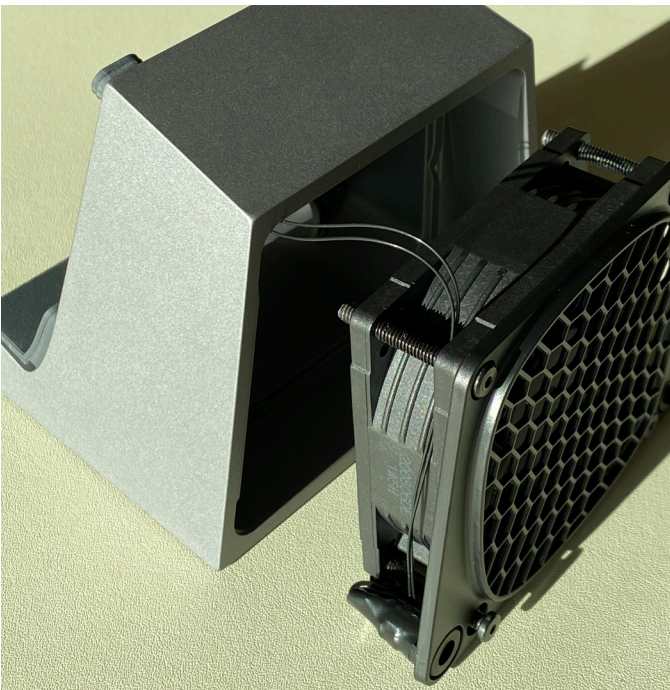
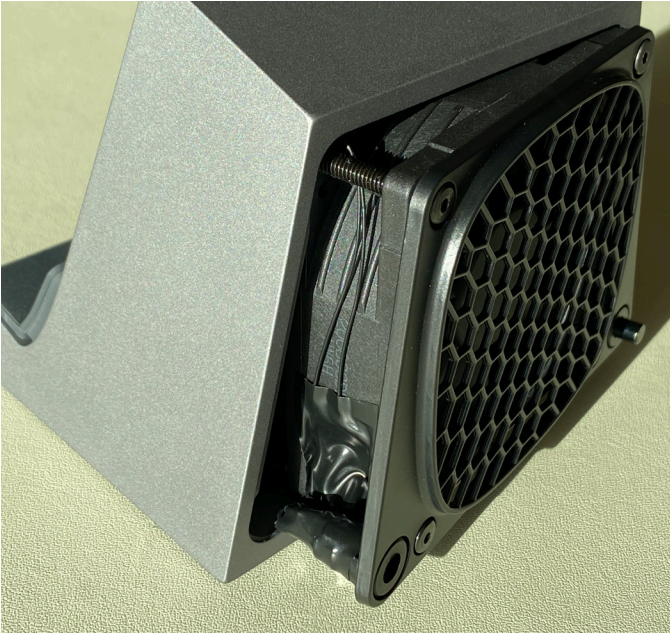
### Preparation

- You will need needle nose pliers or tweezers for installing a DxBLK / D2n / D2 cooling system.
- Work on an anti-static pad if available, otherwise work on a wood table or other low-static non-conductive surface.
- Remove laptop and unplug the Cooling Dock's power supply from the back of the dock.
- Remove the nuts threaded onto the ends of the new cooling system's four fan fasteners. Put the nuts aside as they will be installed onto the fastener ends of the existing cooling system once removed.

## Remove DxBLK / D2n / D2 Cooling System

### Step 1: Open Cooling System

- Loosen but do not fully remove the four fan fasteners on the backside fan screen, taking care not to scratch the screen.
- Once fasteners have been unscrewed from the aluminum dock, then carefully shift the fan screen from side-to-side while slowly pulling out the cooling system just to the point that the side of the fan is exposed but still within the aluminum dock.
- On the left side of the fan (the side with the power jack) there is a piece of black electrical tape holding the thermistor wire against the fan. Remove the tape to free a coil of excess thermistor wire.
- Once the thermistor wire is free, continue to pull out the DxBLK / D2n / D2 cooling system so that it is fully outside of the aluminum dock but the thermistor wire still has some slack in it's connection to the aluminum dock.





## Remove DxBLK / D2n / D2 Cooling System

### Step 2: Remove Pad and Thermistor

- The DxBLK / D2n / D2 thermistor head is held within two layers of front top right pads and a foam alignment plug behind.
- Peel off the upper/outer 1/16" thick pad from the lower/inner 1/8" thick pad.
- Peel off the lower/inner 1/8" thick pad from the aluminum dock.
- Carefully push the front of the thermistor head through the 1/8" thick pad hole (note that if you pull the thermistor wires, be careful to only pull from the head and not the wires to avoid damage).
- A foam thermistor wire alignment plug may fall out, if it does not fall out, then pull it out and put aside.



### Step 3: Remove Cooling System

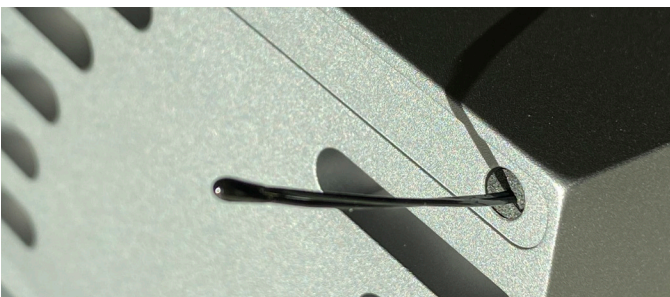
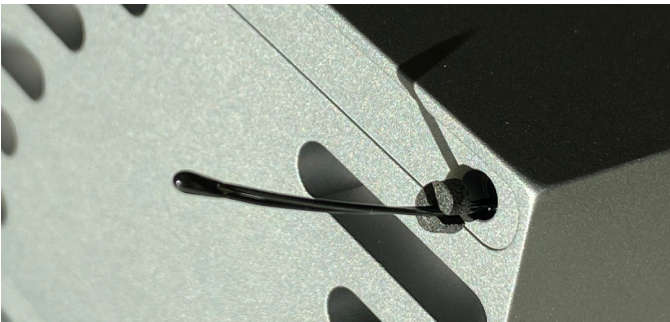
- Pull the thermistor wire and head through the hole in the aluminum dock and towards the cooling system, then pull out the cooling system.
- Install the nuts onto the fastener ends of the removed existing cooling system.
- Remove any loose / excess adhesive from where the old front top pads were located on the aluminum dock.



## Install DxBLK / D2n / D2 Cooling System

### Step 1: Install Thermistor

- Remove the piece of electrical tape holding the thermistor wire to the side of the fan on the new DxBLK / D2n / D2 cooling system, and put it aside for reuse later in the installation process.
- Insert the thermistor head through the thermistor pass-through hole on inside of the aluminum dock cooling system pocket, but do not put the cooling system into the aluminum dock. Keep the cooling system outside of the dock.
- Pull the head of the thermistor wire through the front hole so that it extends one inch past the dock.
- Fit the foam thermistor alignment plug over the wire, then push it into the hole cutout.

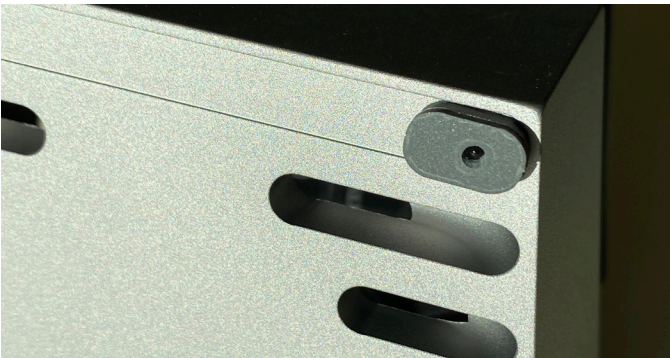
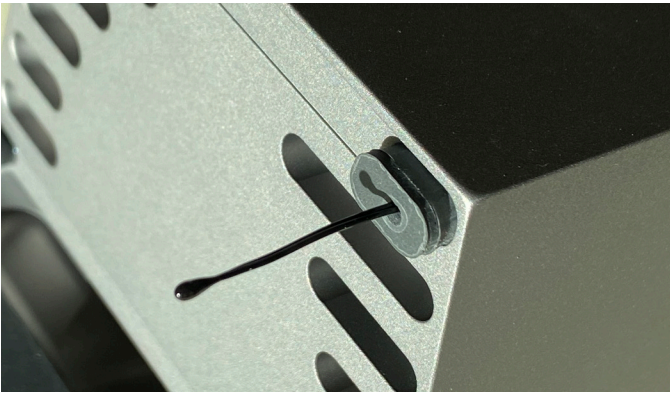
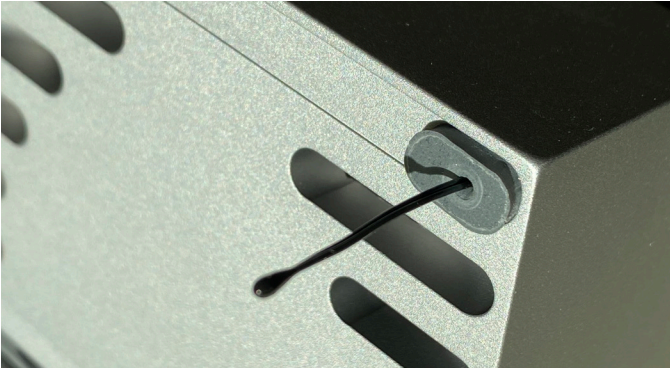




## Install DxBLK / D2n / D2 Cooling System

### Step 2: Install Pad

- Take the replacement 1/8" thick top pad and remove the adhesive cover.
- Take thermistor head and position it within the hole of that pad, entering from the back adhesive side.
- Use your needle nose pliers or tweezers to grip the back of the thermistor head (do not grip the wires as that will damage the thermistor), and push the head all of the way through the pad hole.
- With thermistor head extended out past the pad and the foam thermistor alignment plug set within hole cutout, install the 1/8" pad onto the aluminum dock.
- Take the replacement 1/16" thick top pad and remove the adhesive cover.
- Take thermistor head and position it within the hole of that pad, entering from the back adhesive side.
- Use your needle nose pliers or tweezers to grip the back of the thermistor head (do not grip the wires as that will damage the thermistor), and push the head all of the way through the pad hole.
- With thermistor head extended out past the pad, install the 1/16" pad onto the 1/8" pad.
- Push the thermistor wire through the pad hole and out the back, then push the thermistor head into the pad hole.
- Push the thermistor head into the pad to the point that it is just below the outside surface of the top 1/16" thick pad.
- Once the head is set within the pad hole, firmly press the pads into the aluminum dock to create a strong adhesive bond.

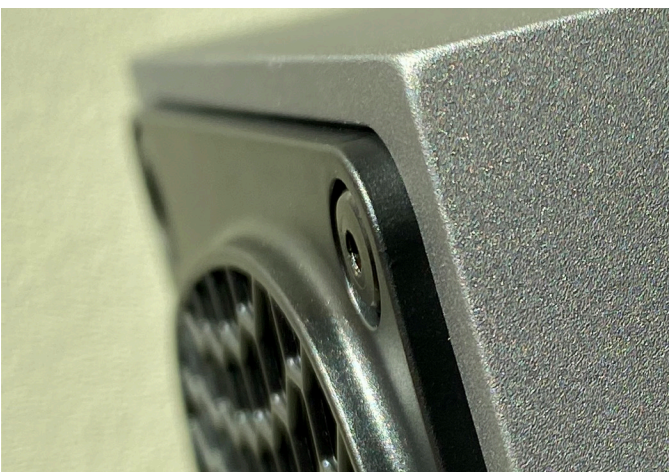




## Install DxBLK / D2n / D2 Cooling System

### Step 3: Install Cooling System

- Pull the thermistor wire from the back and through the gap between the top left fan fastener and the fan so that loose wire is on the left side of the fan (note that the thermistor wire must be located under the fastener).
- Align the new DxBLK / D2n / D2 cooling system with the aluminum dock's back cutout, and insert only the right side while leaving the right side of the fan angled out.
- Coil the excess thermistor wire and hold in place with the piece of electrical tape included with the new cooling system.
- Carefully insert the cooling system into the aluminum dock.
- For DxBLK / D2 cooling systems, the fan fasteners should align with the aluminum dock's threaded holes, but for the D2n cooling system, the fan fasteners will sit higher so push down on the fan screen to achieve alignment.
- Tighten fasteners, taking care not to scratch the rear screen. Typically any fastener will align and allow the tightening process, but if the first fastener you try to tighten does not find it's threading, then try another. For the D2n cooling system, you might need to wiggle/shift the cooling system in place to get a first fastener to grab, after which the remaining fasteners will align.
- Do not over tighten fasteners. Only tighten until the back of the screen just begins to enter into the aluminum dock. Over tightening can damage the screen and other components.







### **Remove DxRED / D1 Cooling System**

- Loosen but do not fully remove the four fan fasteners on the backside fan screen, taking care not to scratch the screen.
- Once fasteners have been unscrewed from the aluminum dock, then pull out the cooling system.
- Install the nuts onto the fastener ends of the existing cooling system.
- Remove any loose / excess adhesive from where the old front top pads were located on the aluminum dock.

### **Install DxRED / D1 Pad**

- This step is only required if a new DxRED / D1 cooling system is being installed after removing an existing DxBLK / D2n / D2 cooling system.
- Install the replacement 1/8" thick pad in the top right corner of the aluminum dock.
- Install the replacement 1/16" thick pad over the 1/8" thick pad.
- Firmly press the pads into the aluminum dock to create a strong adhesive bond.



### **Install DxRED / D1 Cooling System**

- Align the new D1 cooling system with the aluminum dock's back cutout, and insert.
- Tighten fasteners, taking care not to scratch the rear screen.
- Do not over tighten fasteners. Only tighten until the back of the screen just begins to enter into the aluminum dock. Over tightening can damage the screen and other components.