

3D•UP FITTERS

Touchscreen

Installation Manual 1.0

April 2022



We forgot to put something on this page.

Thank You!

We really appreciate you putting your trust in 3D UPfitters to deliver on a new concept in 3D printing. Yeah, it's just a touchscreen data logger, but we've put a lot of care, countless hours, and money into taking something we enjoy using and making it available to everyone.

This is a work in progress and we welcome feedback on how to make operation and installation as seamless as possible. We depend on customer feedback to help us shape the future directions of this product.

Installation and Configuration

Power Cable

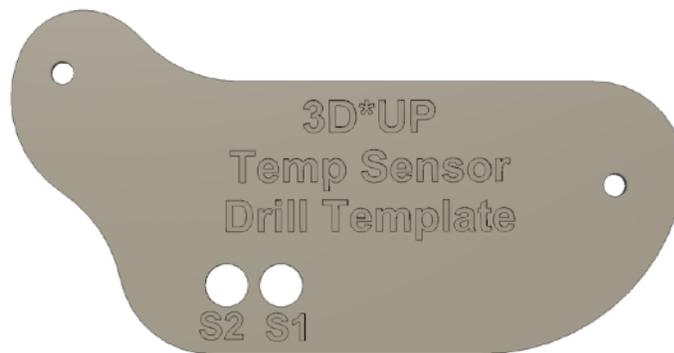
Aint nothing gonna happen until you plug it in. The touchscreen comes with a USB-C to USB-A connector. The USB-C side plugs into the bottom of the case as shown below. We don't provide a wall wart as we highly recommend purchasing power strips with built-in USB power.



Mounting the Case

Installation depends on what exactly you want to do with the touchscreen. The first release has two separate temperature sensors on long wires. The simplest thing to do is lay the touchscreen on the table for testing purposes and use a cable access port to bring the wires inside the enclosure.

If you'd like to mount the touchscreen on your enclosure the STL for a drill template is available at the bottom of the main product page. The holes labeled S1 and S2 will enable you to bring the sensor cables into the enclosure hidden behind the case for a cleaner look.



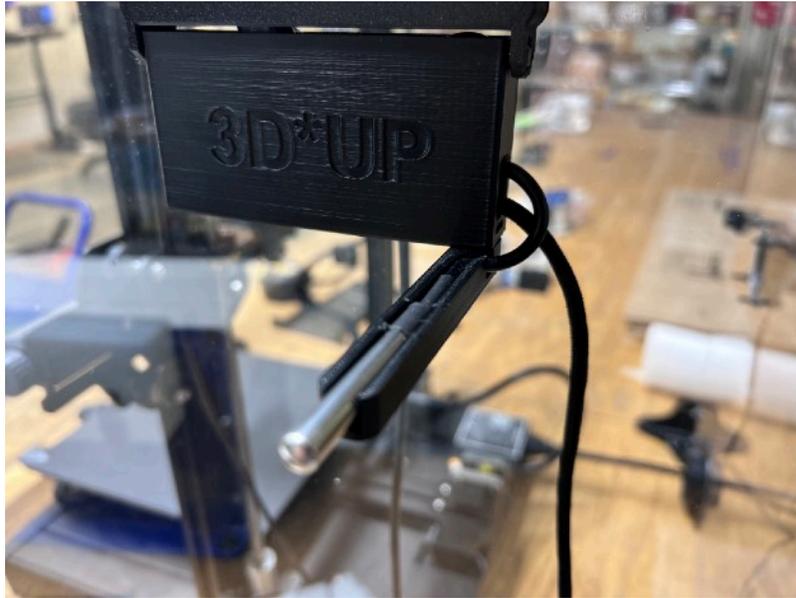
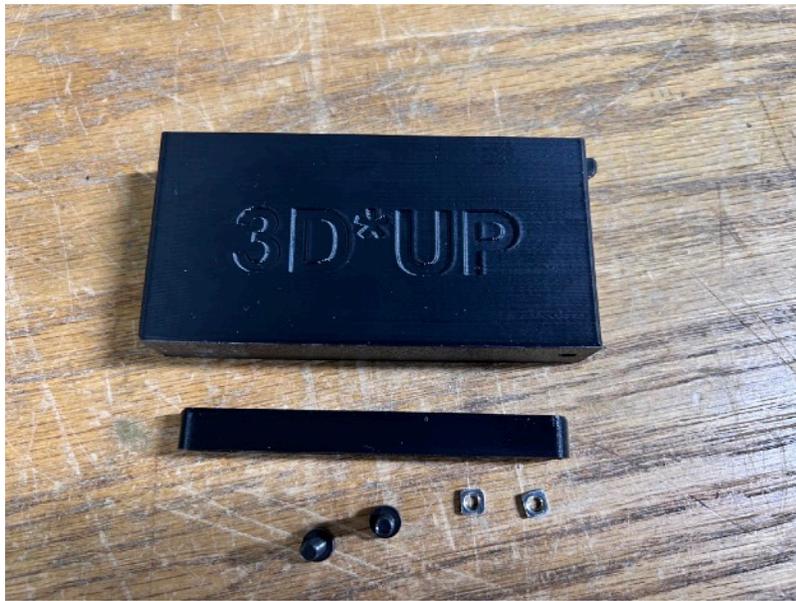
Note that in future versions holes will be added for the VOC sensor and camera. While we don't like having to drill holes, this is the least bad of the available solutions. We will make every effort not to change the location of the holes, future directions make force later versions to not be compatible with this hole pattern. If you are squeamish about leaving holes in your enclosure you'll probably want to wait until later versions are released later in 2022.

3D UPfitters enclosures can also come pre-configured for the touchscreen if you purchase both at the same time. In that case, you'll need to put the desired location in the comments when ordering the enclosure.

Optional Cable Box

If your main use case is to use one of the sensors to measure the room temperature outside of the enclosure, then an optional sensor wire box is provided. This tidies up the exterior cable AND allows you to mount the sensor away from the enclosure so the radiant heat from the enclosure doesn't affect the reading.

The provided screws fit into the square nuts which are inserted into two slits in the box. While these instructions are decidedly terse, hopefully the pictures will provide enough information.



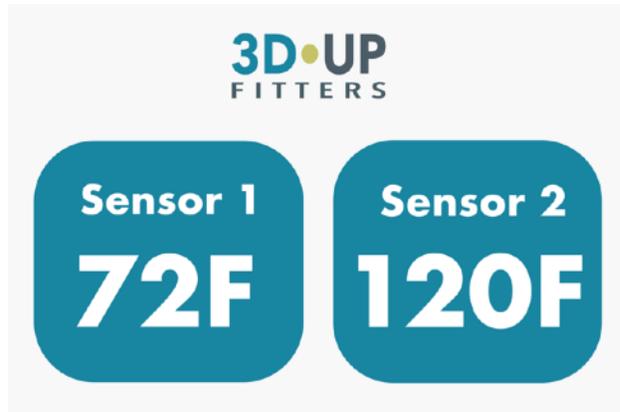
Sensor Placement

Two binder clips are provided to help position the sensors inside the enclosure, or you can DIY your own solution.

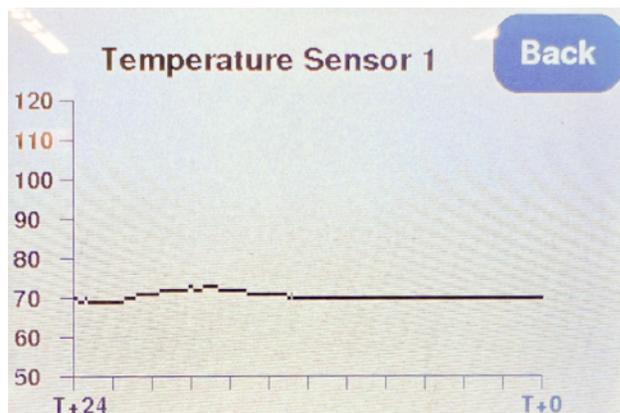


Basic Operation

The first feature delivered is the dual-channel temperature sensor. The main screen shows both of the temperatures in Farenheight. We can add Celcius in the future if people tell us they want it, but we kept the initial release simple in case customers wanted us to go in a different direction.



To view the historical time for each sensor just tap on one of the blue buttons:



Raw Data

The raw temperature data points over the past 24 hours are logged to text files on the SDCARD named "sensor1.txt" and "sensor2.txt". To read or parse the files move the SDCARD to your computer and view using your favorite text editor. Temp values are logged every 30 seconds for the past 24 hours, with T+0 (the latest values) at the bottom of the file.