Dremel 3D Idea Builder

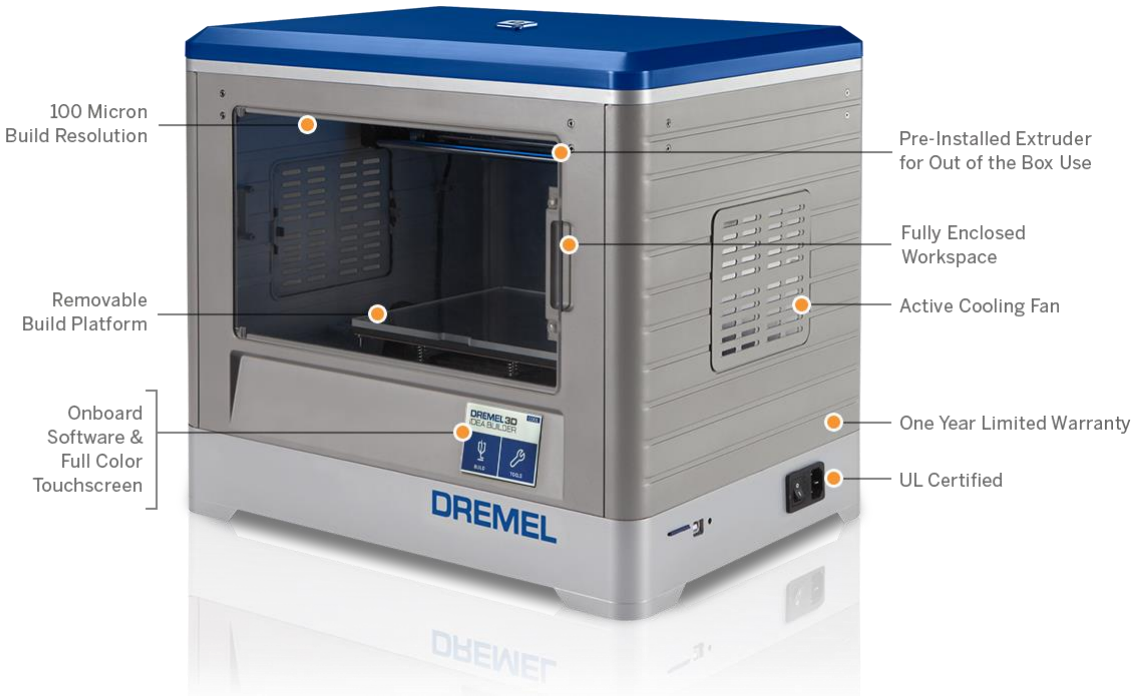


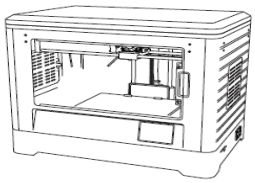
Table of Contents

Overview

Dremel 3D Idea Builder (Model 3D20) is very simple and easy to use. The 3D printer has Touchscreen Panel that the user can manually navigate very easily. Its model is respected for its low performance noise and temperature stabilization while printing. As of now, this product is sold only in Amazon, The Home Depot, Lowe's and Best Buy.

Dremel 3D Idea Builder's filament is capable with PLA filament. Although there is no DRM on the spool, Dremel requests that the user should buy filament from their own maker. If any 3rd party filament is used, it can void the warranty. If the user wants to use other filament, the user must get the appropriate filament size that is used in Dremel and must load it on the Dremel's spool. It is highly recommended that the user should only use Dremel's filament.

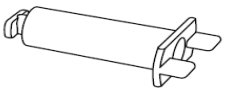
The Dremel 3D Idea Builder is compatible with Windows, Mac, and Ubuntu. The printer prints the filament with just 100 micron thickness. The printer will not recognize any SD cards that are larger than 32GB. The extruder temperature can go up to 230 °C which is 397 °F during its performance. When printing, the model volume can only go up to 9" x 5.9" x 5.5". It will only build if the file format is in .g3drem, .3dremel, or .STL. The build tape should be changed after about 100 prints.

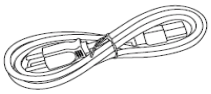

Dremel 3D20

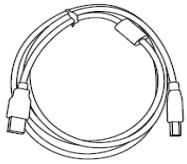

Instruction Manual

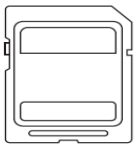
Quick Start Guide


1 Filament Spool*

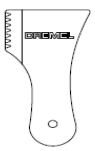

Spool Lock


Power Cable


USB Cable


SD Card

Build Tape

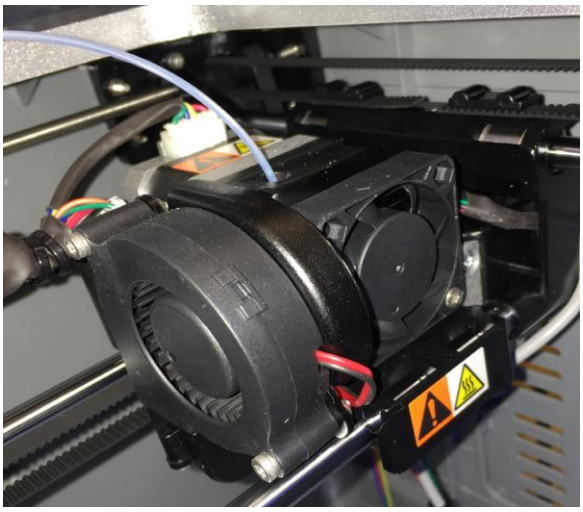

Object Removal Tool


Unclog Tool

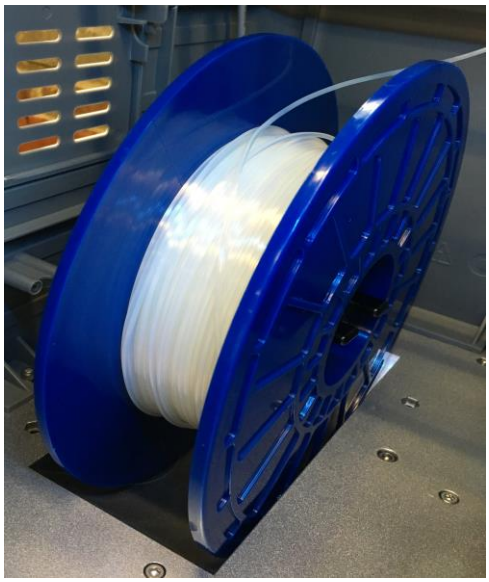
Leveling Tool

Parts Overview

Extruder: Printer head nozzle. PLA filament comes out of the nozzle as it is continuously gets melted. PLA filament is inserted into top of an extruder to be melted. Proceed with caution in any close contact with the extruder, when the printer is activated. DO NOT use water or other chemicals to clean the extruder. Clean it with lint free cloth ONLY.



Filament Spool: Must **always be** PLA filament for Dremel 3D Idea Builder. PLA (polylactic acid) filament comes in every color. Only one filament can be inserted in Dremel. Warranty can be voided if third part filament is used.



Build Platform: Unlike any other 3D printers, Dremel does not need to apply any glue on the build platform to build. Dremel comes with specialized build tape that the user can apply. Depending on the build tape condition, one build tape can last to 50-100 prints.

Printer Set Up

1. Make sure it is powered.

2. Turn on the switch button. (Wait until it loads completely).

3. Check the filament
    a. If need to change, go to **Tools -> Filament**
    b. Click **Unload**, the extruder will heat up to unload the filament.
        i. Wait until the screen gives permission to unload.
        ii. When unloading, pull down to the extruder lever and pull out the filament.
    c. Remove any *filaments* that are inside the printer.
    d. Place the new *filament* in the base of the printer (**Left side).**
    e. Grab one end of the *filament* and put it through the guide tube.
    f. Once it's through, click **Load**
    g. Insert the *filament* into the extruder slowly until the filament goes through the extruder without any assistance. (**DO NOT TOUCH THE EXTRUDER AT ALL TIMES.**)
    h. When the *filament* is going through the extruder, press **Return.**
    i. **Clean out any remaining excess *filament* before printing.**

4. Build platform
    a. If the *build platform* is placed inside the printer, please remove it.
    b. Once it is out, make sure the *build tape* is applied on the platform.
    c. Clean the surface well.
    d. Place the *build platform* back inside the printer.

5. To level the build platform
    a. Go to **Tools -> Level**, wait until it is properly set.
    b. Slide the *leveling card* between the platform and the extruder.
    c. Adjust the platform either turning the knobs to the right or to the left. (Three knobs are located below the platform). **Left is down and right is up.**
    d. **Adjust until little resistance is applied while sliding.**
    e. Click **Next** when done adjusting one side.
    f. Repeat step **5c** until completely finished.
    g. Click **Finished**

How to Build

1. Once **Printer Set Up** is done then proceed to build.

2. Click **Back** then click **Build.**

3. If the file is in *USB*, the file will be inside the storage.

4. If the file is saved in ***SD Card***, SD button will show.

5. Click the model to print.

6. While building, there are three options. **Stop, Pause/Play, and Filament.**

    a. **Stop:** Cancel the build.
    b. **Pause/Play:** Pause or resume the building.
    c. **Filament:** Unload or load the *filament* while it is paused.
        i. *When the print is stopped, it will not resume back to where it was stopped.*

7. Wait until the model is completely finished.

8. Open the glass, take off the platform and carefully take off the model with *object removal tool*.

Troubleshoot

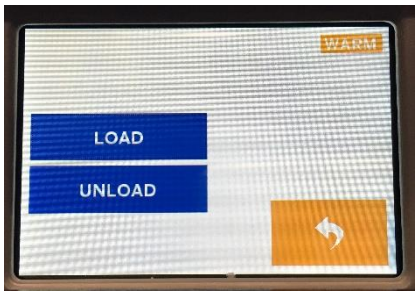
1. Filament is not coming out while building
    a. Cancel the build then press **Tools -> Filament -> Unload.**
    b. Wait until fully heated.
    c. Press the extruder lever and pull the filament.
    d. Once taken out, use the *unclog tool* to push out the remains of any filament inside the extruder.
    e. Cut out bulky end of the filament and insert it back into the extruder.
    f. Press **Load** and wait till filament comes out of the extruder then click **Finish**.

2. The model is not building from the center
    a. Cancel the build and click **Tools -> Home**.

3. 3D file receives a warning that the file is not closed.
    a. Open the file on CAD editing software to close all the open surfaces.

Tools

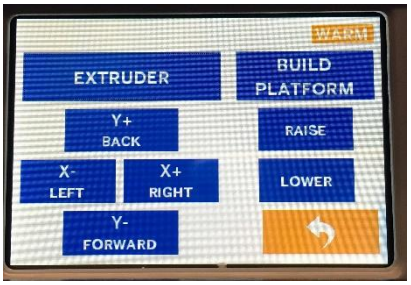
1. **Filament**
    a. **Load:** Heats the extruder for loading purposes. (See Printer Set Up pg. 4 for instruction on load the filament).
    b. **Unload:** Heats the extruder for unloading purposes. (See Printer Set Up pg. 4 for instruction on unload the filament).



2. **Level**
    a. Performs build platform fine tuning for printing. (See Printer Set Up pg. 4 for instruction on leveling the platform).

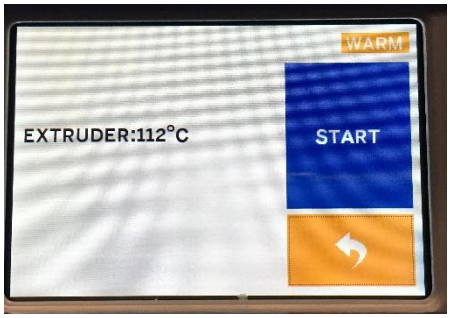
3. **Home**
    a. Moves extruder and build platform to calibrate to its default position.

4. **Jog Mode**
    a. Positions the extruder and build platform with the options of moving them along X-axis, Y-axis, and Z-axis.

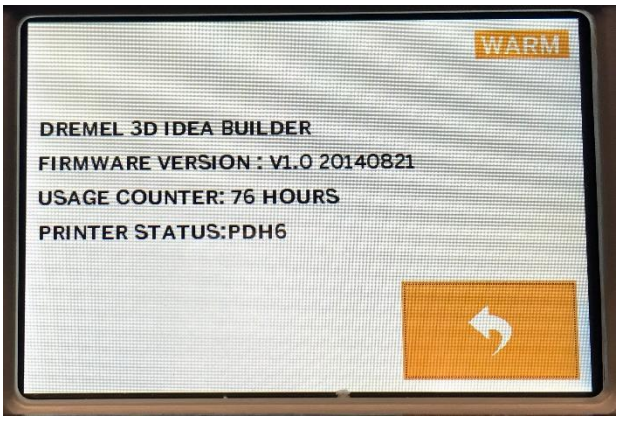


5. **Setting**
    a. Option to change the printer's setting such as language, factory reset or TP adjust.

6. **Preheat**
    a. Preheats the extruder for building or removing excess filament. The temperature rises slowly, and have the option to start or stop the preheating.



7. **About**
    a. Shows the product's serial number, firmware version, usage counter, and printer status.



Reference

Dremel 3D Idea Builder Image. Digital image. *Dremel 3D Idea Builder*. Robert Bosch Tool Corporation, n.d. Web. 20 Feb. 2016. <https://3dprinter.dremel.com/3d-printer-benefits>.

Printer_Manual. (2016) (1st ed.). Racine. Retrieved from https://3dprintersupport.dremel.com/hc/en-us/articles/201203529-Printer-Manual