



Connecting to FUSD Network (Wired & Wireless)

Wired

From main Robo menu tap on Tools, Tap on Network, Tap on Ethernet

If you haven't already connected an Ethernet cable you will see a screen asking to 'Please connect the cable' After a few moments you will see a Check and the IP address will be displayed on the screen. Please write this down you will need it later.

Tap the Back Arrow and work your way back to the main screen.

Wireless

From main Robo menu tap on Tools, Tap on Network, Tap on WIFI

WiFi should be Off and Greyed-out, Tap to turn On and Enable

After a few moments of scanning for Wireless networks you should see the list populate.

Tap on 'FUSD-Guest' to connect to that Wireless network. (Note: If you do not see FUSD-Guest network you will have to connect via Ethernet or use a USB stick to transfer files to the Robo3D E3 Printer)

After Tapping on FUSD-Guest you should see a dialog box indicating that it is 'Connecting' to the Wireless network.

After a few moments you should see 'FUSD-Guest' above Choose a Network with a Check next to it.

This indicates that you are connected to the 'FUSD-Guest' Network.

Tap on the 'FUSD-Guest' and you should see a message indicating you are connected and it will display the printers IP address xxx.xxx.xxx.xxx:8899. Please write this down you will need it later.

Tap on 'OK' and work your way back to the main screen.

Installing RoboPrint on your Computer

From your computer go to the following URL <https://robo3d.com/pages/desktop-software> and click on the 'Download for Windows' button.

A dialog box will open, Click on 'Save File'. If you are asked where to save the file to choose somewhere easy to locate like your Desktop, otherwise it is probably in your Downloads folder.

Go to the location where the file 'RoboPrint_x.xx.x_x64.exe' was downloaded to and Launch it to begin the RoboPrint Setup.

After launching the file you should see a dialog box aptly titled 'RoboPrint Setup'.

We will be choosing all of the Default highlighted values all the way through the setup ending with the 'Finish' button.

Note: You will need to click on the 'I accept the terms of the License Agreement' button before you can continue.

After Clicking on the 'Finish' button the Installation will quit and RoboPrint will launch.

Launching RoboPrint for the First Time

The First time RoboPrint launches it will go through an initial configuration and walk through.

Upon launching RoboPrint for the First time it wants to know what type of Printer you have so you will see a window labeled 'Select type of Machine'. Make sure you see 'robo E3' in the drop-down menu and Click on 'OK' Next you will see 3 windows showing you how to navigate and describing various features.

Look through these and Click on 'Continue' or the X in the upper right corner if there is no 'Continue' button.

You should now be at the main RoboPrint window. This is the Window you will see when you launch RoboPrint.

If you setup a wired or wireless connection earlier we are now going to connect to the printer through the network.

From the Main Menu bar across the top of the screen click on 'Print' and then "Connect Machine'.

When you see the 'Connect Machine' dialog box click on the 'Connect Mode' drop down and choose the connection type you setup earlier Wired or Wi-Fi.

Type in the IP address that you made a note of earlier and click on the 'Connect' button.

At this point we are ready to begin printing.

Downloading Models and Printing them on the Robo3D E3 Printer

There are various ways to acquire 3D models for Printing. You can download ready made models from repositories like Thingiverse or Google Warehouse. You can create your own from scratch using modeling software such as Tinkercad, Sketchup, Fusion, or you can load ready made models into the before mentioned modeling software and modify them in a process called 'Mixing'.

For our purposes of showing you how to print we will use a ready made model from the Thingiverse Repository. Note: Thingiverse has over a 1,512,490 ready made models that are free for you to print for personal use.

From a web browser of your choosing go to the following URL: <https://www.thingiverse.com/thing:910216>. From this page there are 2 usually important sections as you scroll down the page, Instructions and Print Settings. It is here that as you become more familiar with printing that you will find valuable information as to what settings were used for printing the original model and what type of printer it was printed on.

As the models you print become more complex this information will become more relevant, for our purposes it is just good to know that it is there.

Next to 'Thing Details' under the picture of the model Click on 'Thing Files'. Here you will see the File or Files that make up this model. For this print there is only a single file, if you were printing something like a moving car or transmission model you could potentially see dozens of individual files that make up the overall model. Since we are starting simple you can just click on the 'sharkz.stl' file and you will get a 'Save File' dialog box. Save to someplace you can find such as the Desktop or your Downloads folder. Note: if this had been a larger model with multiple parts we could have clicked on the 'Download All Files' or 'Agree & Download' buttons. What this does is take all the files and Zip's them together as a single download that you will have to extract later. By clicking and downloading the single file we will not have to extract it before we can open it in RoboPrint.

Now that we have a file to Print launch RoboPrint if you have not done so already.

You should now be at the Main workspace. From the 'File' menu across the top Click on 'Load File'.

In the 'Select a file for loading' dialog box choose the sharkz.stl file we downloaded and Click on the 'Open' button. After a few moments of loading you should see the model somewhere in the cube that appears in the main window. When we first launched RoboPrint it asked us what type of machine we were using, this is one of the reasons why. The cube that you are looking at is the Printing Dimensions of the Robo3D E3. Any model that you can fit within this bounding box can be printed. For our purposes we just need to verify that the sharkz model is within the lines and laying flat on the bottom of the box which represents the platform of our printer.

Click on the 'Print' button on top and choose the following settings:

- Material Type - PLA
- Raft - Enable,
- Resolution - Standard

(The more you print the more these settings will become relevant). Click on the 'OK' button.

You will see a green bar across the bottom with the words 'Slicing model.....' across the bottom.

The Print settings and 'Slicing Model' are part of a much longer discussion and beyond the scope of 'How to Print' that we are focusing on right now.

After your sharkz model has completed 'Slicing' you can click on the 'Print' button that appeared in the upper right corner of the window to send the model to your E3 printer and it will automatically start printing after running through its initialization steps.