

The Robox logo is located in the top right corner. It consists of the word "robox" in a white, lowercase, sans-serif font, enclosed within a blue rounded rectangular shape that resembles a speech bubble or a stylized container.

robox

A large, stylized blue frame surrounds the central text. The frame is composed of thick, rounded lines that create a sense of depth and perspective, resembling a 3D wireframe or a thick border. It frames the title and subtitle, and also encloses a blue rectangular shape in the lower half of the page.

# Quick Start Guide

including AutoMaker™

Version 1.0

[www.cel-robox.com](http://www.cel-robox.com)

## Package Contents

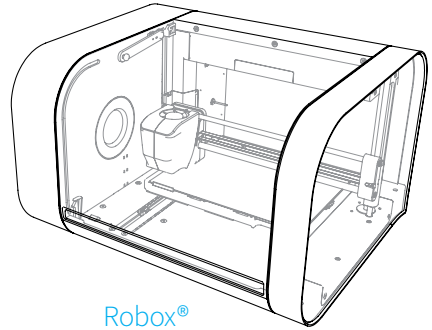
Check your product package for the following items.



2m USB A-B Cable



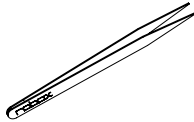
IEC C5 Power Cable



Robox®



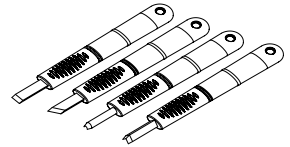
USB Flash Drive



Tweezers



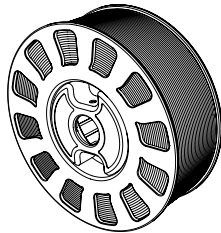
10x Bed Wipes



Set of 4 Cleanup Tools



Axis Lubricant



SmartReel™



Safety Guide



Warranty Card

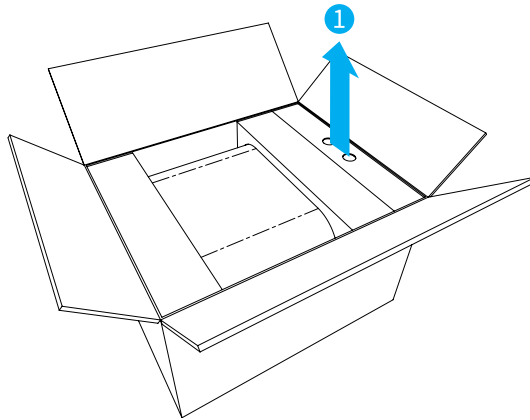


- If any of the above items are damaged or missing, contact your retailer.
- The illustrated items above are for reference only. Actual product specifications may vary with different models.

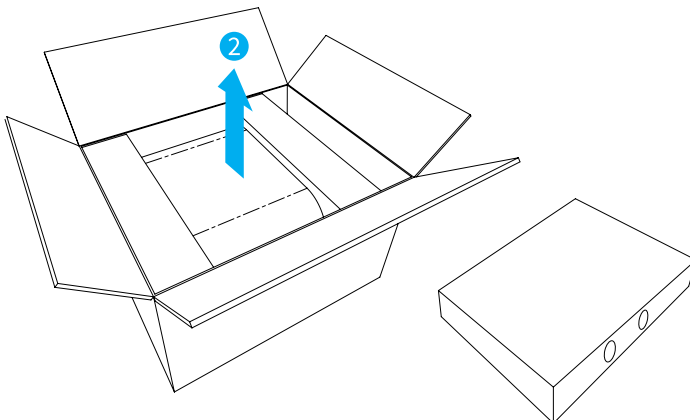
## Unpacking Robox®

This section explains how to safely unpack your new Robox® and get it ready for production! Your new micro manufacturing platform has been carefully assembled and packaged at our factory to arrive with you in perfect condition. Please follow the instructions below carefully to avoid causing any damage.

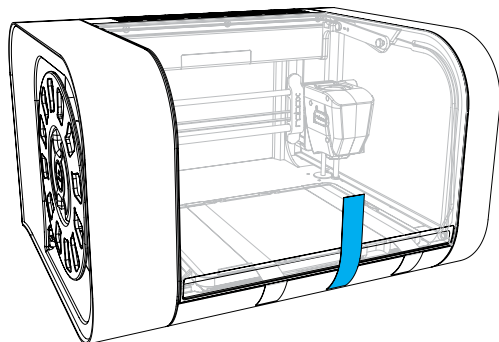
1. Carefully cut the tape along the top of the box, being careful not to cut too deep, and open the box.
2. Remove the accessories box from the side by pulling on the plastic handle.



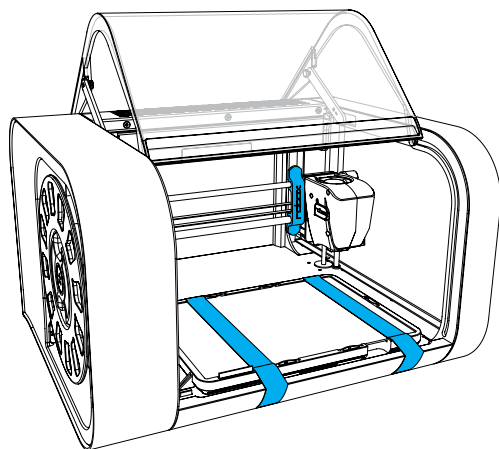
3. Lift Robox® from the box using the two handles in the packing trays on either side.



4. Remove the packing tape which is used to secure the door.



5. Remove the packing tape and warranty card which are secured to the bed and the blue plastic packing clip used to secure the printhead.



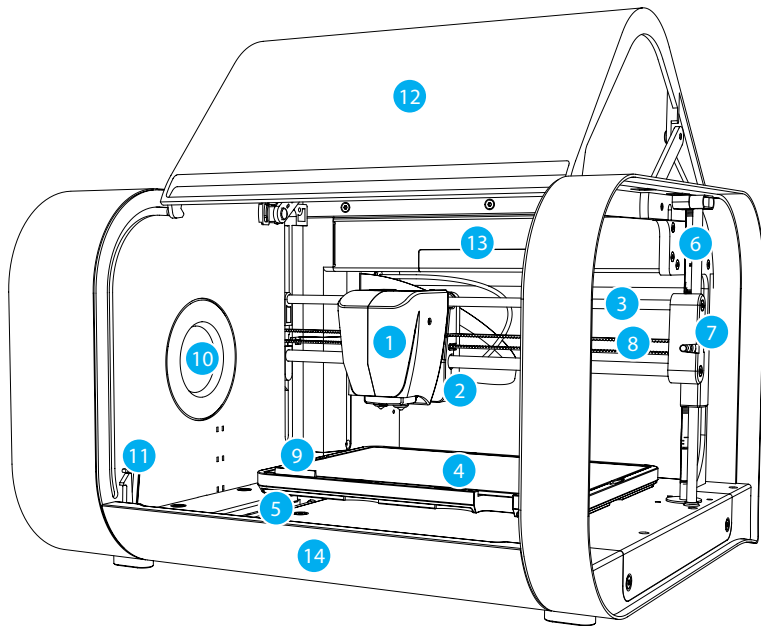
6. Ensure that the head and bed are free to move before proceeding. You can move them both by hand to check.



- We recommend that you keep hold of all of your packaging materials, should you need to return any parts to us.

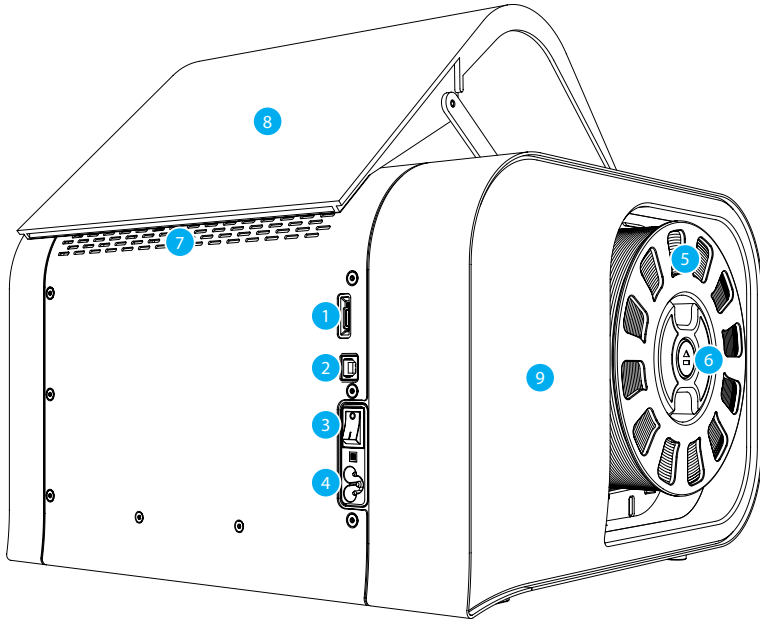
## At A Glance

This section highlights all the major features of Robox®.



- |                               |                              |
|-------------------------------|------------------------------|
| 1 Print Head                  | 8 X Axis Belt                |
| 2 X Carriage                  | 9 Tip Wipe Blade             |
| 3 X Axis Rails                | 10 Reel Hub Cover            |
| 4 Print Bed                   | 11 Door Interlock Latch      |
| 5 Y Axis Rail                 | 12 Enclosure Door            |
| 6 Z Axis Rail and Drive Screw | 13 Internal Ambient Lighting |
| 7 Z Carriage (Right)          | 14 Front Tray Cover          |

This view shows the rear connections of Robox® and the SmartReel™ location.



- |   |                             |   |                           |
|---|-----------------------------|---|---------------------------|
| 1 | microSD Card Flash Storage  | 6 | Pause/Resume/Eject Button |
| 2 | USB Type B Socket           | 7 | Outlet Vents              |
| 3 | Power Switch                | 8 | Door                      |
| 4 | C5 'Cloverleaf' Power Inlet | 9 | Side Cover                |
| 5 | Robox® SmartReel™           |   |                           |



- Although there is a microSD card accessible from the back of Robox®, this cannot be read by any other machine and is only for use as internal flash storage - access is provided only for diagnostic/repair purposes.
- Do NOT connect the USB cable until you have completed the software installation on the following page.

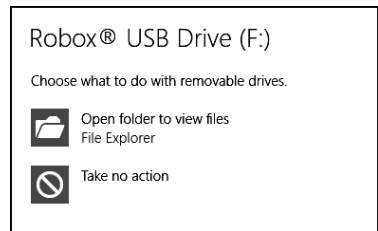
## Software Installation

This section explains in detail how to install the AutoMaker™ software package for controlling your Robox®. The included USB card drive contains this software and an electronic version of this document, as well as some sample .stl files for you to print.

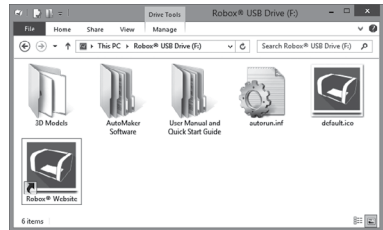
These steps may vary slightly depending on your operating system, *all provided screenshots and instructions are from Windows 8 for reference.*

1. Plug your included USB drive into an available USB port (drive letter may vary) - choose **Open folder to view files**:

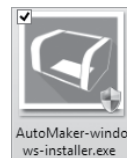
If this is not displayed, you can access the drive through **My Computer**.



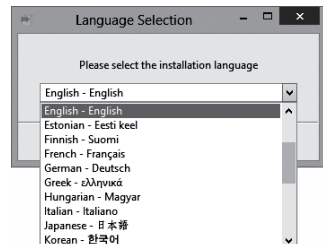
2. The contents of the drive will be displayed in **File Explorer** as shown (view mode may vary).



3. Navigate to **\AutoMaker Software\Windows** and run the installer by double-clicking on the icon - **AutoMaker-windows-installer.exe**



4. Select the installation language from the dropdown menu, and then click **OK** to continue.




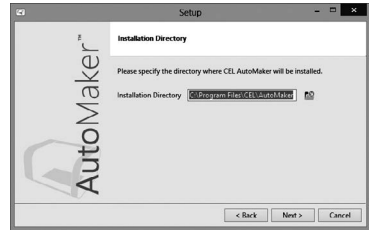
5. The installer will start, click **Next >** to continue.



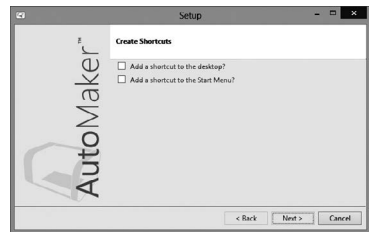
6. Please carefully read the Licence Agreement and select **'I accept the agreement'**, then select **Next >** to continue.



7. Please choose where you would like to install AutoMaker™, either by typing the path directly, or by clicking the  button. Click **Next >** to continue and accept the path and begin the installation. N.B. To facilitate future support we recommend using the default install location.



8. Choose whether you would like to add Shortcuts to the Start Menu or Desktop. Then click **Next >** and wait as AutoMaker™ is installed to your hard drive.



9. Installation is complete. Tick the checkbox if you would like to read the 'Readme' file after clicking **Finish**.





## Setting Up Your Robox® Account

When you start AutoMaker™ for the first time, the product and customer registration screen will be displayed, allowing you to register for product updates, support and warranty repairs. Please complete all sections before continuing.

**Robox® User Account**

First Name:  Robox® Serial No.:

Surname:  Head Serial No.:

Company Name:

Address Line 1:

Address Line 2:

Address Line 3:

Town/City:

Region/State:

Postal Code:

Country:

Date of Purchase:

Purchased From:

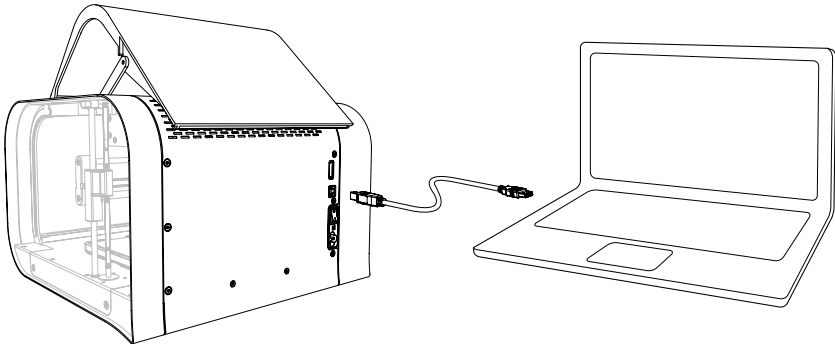
Username:

Password:

I will read and agree your details with this page without your consent. We will use your details to provide you with product updates and other information about our products, services, and other information about our company. If you would prefer to receive this information please let us know.

## Attaching the USB Cable

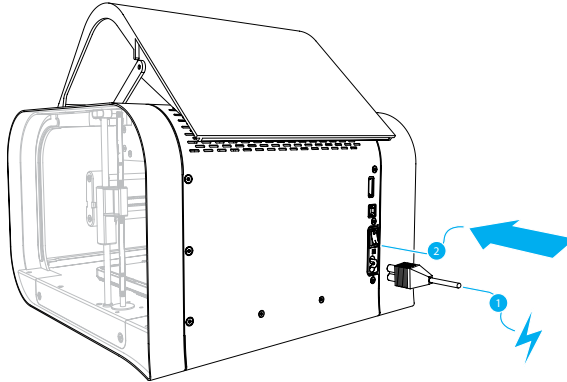
Robox® comes supplied with a 2 metre USB Type A-Type B cable for connecting to your PC. Please connect as shown.



- **DO NOT** connect your Robox® until you have been through the software installation steps on the previous page and started AutoMaker™.

## Attaching the Power Cable and Powering On

Connect the supplied AC power lead to Robox® and switch on using the rear power switch.



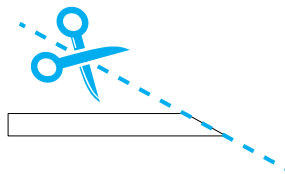
This will install the necessary drivers for connecting your Robox® and could take a few minutes. When correctly installed and switched on, it should appear in Device Manager as a COM port called “Robox v1.0 (COM3)” (COM number may vary). It should also appear on the Status Page of AutoMaker™, along with what reel and head are installed - for more information please refer to the user manual.

## Loading Filament

This section explains how to load your chosen 3D printing plastic filament into Robox® ready to produce your first print! It is designed to be a very simple process with most functions taking place automatically.

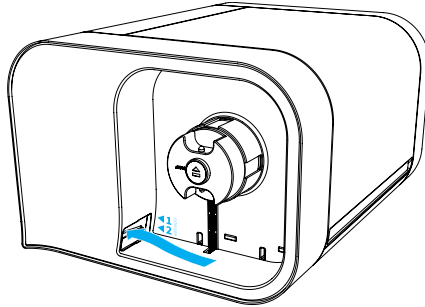
### Preparing the Filament

Before attempting to load filament, it is advisable to cut the end at a shallow angle using a knife or sharp scissors to produce a sharp tip as shown below. This will allow the filament to enter the extruder and melt chamber more easily.



## Feeding to the Head

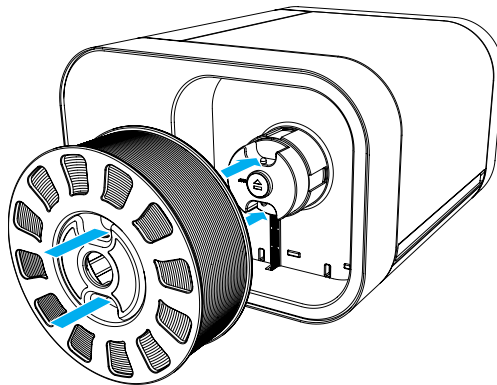
Simply feed the end of the filament into one of the two extruder entrances located in the bottom-left of the reel storage dock. If only one extruder is installed in your machine, use the top path marked '1'. It is much easier to perform this operation **BEFORE** installing the reel into the dock.



Once the filament reaches the extruder, you will hear the motor start; at this point continue to feed in until you feel the filament has been grabbed. Robox® will then automatically feed the material all the way to the head.

## Installing the Reel

Finally, install the SmartReel™ into the dock, you should hear a click when it is correctly located, and it should appear as a recognised reel in AutoMaker™. Congratulations! You're now ready to print.




## Print Workflow


Now you're ready to start manufacturing, this section leads you through the simplest workflow for producing a model from an .stl file. For information on other software features, please refer to the user manual and website.

### Status Screen





On starting AutoMaker™, the status screen will be the first screen that is displayed. This screen gives you a broad overview, showing you what printers are connected and what filament is installed. From here you can unlock the door, eject filament and start a new project.

To start a new project, click the  **Next** icon in the bottom right hand corner (in the toolbar) to move to the Layout Screen.


### Layout Screen

This part of AutoMaker™ is used for laying out the parts you want to print and for manipulating them (size, rotation, position). To add a new model, click the  **Add Model** button. This will display the **Select a model** dialog, which will allow you to browse your computer for a model file in either .stl or .obj format. You will find some sample models on the included USB Drive under '3D Models'. Once you have selected a model, click **Open** to add to your project.

You will then see your chosen model displayed on the bed. You can manipulate the view using the right mouse button:

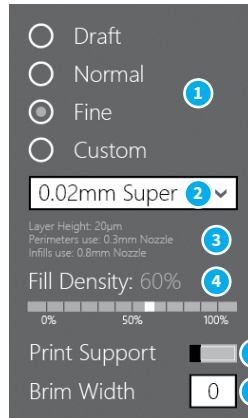
-  Rotate View (click and drag)
-  Pan View (click and drag)
-  Zoom (roll wheel)
-  Select and manipulate models

To move an object around on the bed, simply select it with the left mouse button and drag it to where you'd like it to be. <Ctrl> + left mouse click will allow you to select multiple models, and <Ctrl> + <A> will select them all. If it is outside of the build volume or overlapping with another object, the model will turn red to indicate it cannot be printed. You can also scale and rotate models by typing values into the input boxes on the left hand side of the screen.

Once you are happy with your layout, click the  **Next** icon to proceed to the Settings Screen.

## Settings Screen

This part of AutoMaker™ is used for modifying any settings relating to the print before proceeding to production, including support material, speed/quality and fill density.



- |                        |                            |
|------------------------|----------------------------|
| 1 Quality Setting      | 4 Fill Density             |
| 2 Custom Print Profile | 5 Support Material Setting |
| 3 Profile Summary      | 6 Brim Width               |

- **Quality Setting**

This allows you to select a basic quality setting from the list of options - Draft, Normal or Fine. The final option - Custom allows you to create a new profile or to select from a previously created one. To create a new profile, click the selection box and choose Create New... - for more information on this, see the User Guide.

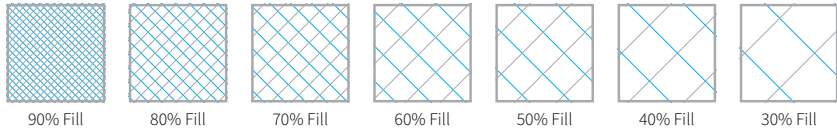
- **Profile Summary**

This displays a brief summary of the currently selected print settings. The information available is as follows:

- Layer Height in microns ( $\mu\text{m}$ ).
- Perimeters use - which nozzle is used to print the outside surface
- Infills use - which nozzle is used to print the inside fill of the object.

- **Fill Density**

This setting allows you to choose how ‘solid’ you would like the finished object to be. The fill pattern can also be changed using a custom profile - for more information on this, see the User Guide.

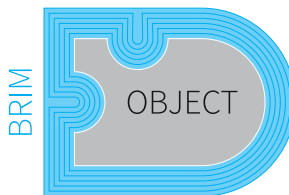


- **Support Material**

This switch toggles the printing of support material. If you are printing a part with large overhangs, you may wish to print structures at the same time to support the object. Support settings (e.g. density and type) can also be changed when using Custom profile - for more information on this, see the User Guide.

- **Brim Width**

‘Brim’ is a term applied to FFF (Fused Filament Fabrication) which describes a large flat area which is printed around the part to help with bed adhesion and warping. It can be easily trimmed off after printing, but may greatly increase the success rate of prints with a small surface area at the base. This number specifies the number of loops (and therefore the width) of the brim.



## Starting Production

Once you are happy with your project layout and settings, you can proceed to production by clicking the **▶ Make!** button - watch as your creation appears before your eyes! AutoMaker™ will provide you with an estimated time to complete, and a progress bar which shows the percentage completed.

For more information on all aspects of operation - hardware and software, please refer to the User Manual which you will find pre-loaded onto the enclosed USB drive, or to our website, shown below. **Happy Manufacturing!**

This section contains contact information for CEL Technology Ltd. There are separate details for Support, Sales and Feedback.

## Support

For product support, we have a ticketing system available online which allows you to track the progress of your support request. Please sign up for an account and submit a ticket at:

 [robox.freshdesk.com](https://robox.freshdesk.com)

## Sales

For sales of accessories and consumables you can contact:

 [uksales@cel-robox.com](mailto:uksales@cel-robox.com)

Or visit our website at:

 [www.cel-robox.com](http://www.cel-robox.com)

## Feedback

Please send all general feedback on Robox® to:

 [feedback@cel-robox.com](mailto:feedback@cel-robox.com)

## Distributor Contact Details

If you purchased your Robox® from an authorised CEL reseller - please find their contact details below:



Please direct all support and sales enquiries here in the first instance.



RBX01-ACC-QSG

