

#### Welcome

Thank you for purchasing the Robox® micro-manufacturing platform and welcome to the future of custom manufacturing!

Robox® provides you with the capability to produce three-dimensional models in a variety of thermoplastic materials and with our HeadLock™ easy replacement system, you can begin to explore a whole range of personal manufacturing possibilities.

## Learn More

Refer to the following sources for additional information and for product and software updates.

#### Ouick Start Guide

You will find this in the product packaging along with this safety guide. It contains a brief setup guide for Robox® to get you printing as easily as possible.

#### User Guide

This is supplied in digital form - pdf and .mobi/.epub for digital readers. You will find it on the USB drive included with the product.

## Official Robox® website - www.cel-robox.com

The Robox® website provides up to date information on available hardware and software products compatible with the system. It also contains contact details, warranty information and support.

## Optional Documentation

Your product packaging may include optional documentation, such as warranty flyers, that may have been added by your dealer. These documents are not necessarily part of the standard package.

# Important Safety Information

The following precautions should be made to ensure the safety of yourself and your environment and to protect the product from damage. Please follow these precautions at all times:

## **Electrical Safety**

- To prevent electrical shock hazard, disconnect the power cable from the electrical outlet before relocating the system or performing any maintenance.
- Seek professional assistance before using an adapter or extension cord. These devices could interrupt the grounding circuit.
- Use the power supply voltage specified on the rating label. Avoid overloading an electrical outlet with multiple devices.
- Use only the power cable supplied with the product. Do not damage, cut
  or repair the power cable. A damaged power cable carries a risk of fire
  and electric shock. Replace a damaged power cable with a manufacturer
  approved power cable.
- Please do not disassemble the product, there are no user serviceable parts inside. If you experience any problems, please contact your local Service Representative or CEL Technology. See the 'Contact Us' section of the User Guide / Warranty Card.
- Ensure the product is well-grounded. Failure to ground the product may result in electrical shock, fire and susceptibility to electromagnetic interference.

## **Operation Safety**

- Before using the product, ensure all cables are correctly connected to a power supply that matches the rating label and the power cables are not damaged. If you detect any damage, contact your retailer immediately.
- Do not place the product in any area where it may become wet or damp and avoid dusty, humid and high temperature environments which could negatively affect product performance. The printer is designed to work properly at an ambient temperature of between 15°C and 25°C and humidity of between 20% and 50%; Operating outside these limits may result in low quality models.
- Place the product on a stable surface away from flammable substances.
- Do not allow metal or liquids to touch the internal parts of the product. Doing so may cause damage, fire, electric shock or other serious hazards.
- Always use the product in a well-ventilated area.

- Do not use ABS plastic or its printed parts near any kind of heat source flames, fireworks, candles, incense, light bulbs etc. ABS will catch fire and burn a thick black toxic smoke.
- Power off the product and disconnect the power cable from the power outlet in any of the following cases:
  - If there is any smoke coming from the product.
  - If the product is making an unusual noise not heard during normal operation.
  - A piece of metal or a liquid touches the internal parts of the product.
  - During an electrical (thunder/lightning) storm
  - During a power failure
- When the 3D printing head is installed in the product, there are moving parts which can cause injury and heater elements which generate temperatures in the region of 200-300°C. Never reach inside the product while it is in operation, and never touch the print head while it is hot.
- Always allow the product to cool down completely before reaching inside.
- Never try to override the interlock on the door which protects the user from these dangerous temperatures.
- Contact with extruded material from the 3D print head may cause burns. Wait for printed objects to cool before removing them from the build plate.
- Do not leave Robox® unattended during operation.

## Safety Guidelines

- Follow all safety rules in this section and observe all cautions and warnings in this guide (and those from any additions and materials used in conjunction with the product).
- Before using the product, carefully read and understand all the manuals that were included with the package. Check for updated versions on our website.
- Do not modify any safety features or make modifications to Robox®. Doing so is prohibited and may void your warranty and/or affect the safe operation of the product.
- Use of print materials other than Robox® print materials and genuine Robox® components may void warranty.
- Tie back long hair and loose clothing and keep fingers away from moving parts.

- Adult supervision is required; observe children closely and intervene as necessary to prevent potential safety problems and ensure the appropriate use of the product. Ensure small 3D prints are not accessible to young children.
- These 3D prints are potential choking hazards for young children. Protective glasses should always be worn when removing support material, especially PLA.
- Do not use the product to create items which may be in contravention of laws or regulations applicable in your area.
- If you encounter technical problems with the product, contact a qualified service technician, your retailer or CEL Technology.

# Safety Symbols and Definitions

These safety symbols are used on product warning labels:



• *Hot Surface Hazard:* Information to prevent injury to yourself when trying to complete a task.



• Caution: Indicates a pinch point hazard that could cause person injury.



 Caution: Indicates an area which carries risk of electric shockdisconnect from the power outlet before accessing.



• *Corrosive:* Used on materials which may be corrosive and cause harm to skin and/or eyes. Wear protective eyewear and gloves.

# Legal Notice

The only warranties for CEL Technology products and services are set forth in the express warranty statement accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. CEL Technology shall not be liable for technical or editorial errors or omissions contained herein.

# Copyright

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## Regulatory and Environmental Information

## Electromagnetic Interference

The normal functionality of the product may be disturbed by Strong Electro Magnetic Interference. If you are experiencing problems, reset the product by cycling the power to resume normal operation. If normal functionality does not resume, please try using the product in a different location

## FCC Statements (U.S.A.)

The U.S. Federal Communications Commission (in 47 cfr1 5.105) has specified that the following notices be brought to the attention of users of this product.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Shielded cables:** use of shielded data cables is required to comply with the Class A limits of Part 15 of the FCC Rules.

**Caution:** Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by CEL Technology Ltd. may cause harmful interference and void the FCC authorization to operate this equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their own expense.

## Canada Electromagnetic Compatibility (EMC)

## Normes de sécurité (Canada)

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe A prescrites dans le réglement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada.

## DOC statement (Canada)

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

## MSDS (Material Safety Data Sheets)

You can obtain current Material Safety Data Sheets for the materials used in the product at: www.cel-robox.com/materials

# Disposal of waste equipment by users in private households in the European Union (WEEE)

This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.



## **Declaration of Conformity**

Manufacturer: CEL Technology Ltd.

Unit 1604, 16/F Nan Fung Commercial Centre,

19 Lam Lok Street, Kowloon Bay, Hong Kong

UK Representative: C Enterprise (UK) Ltd.

Unit 3 Harbourmead, Harbour Road.

Portishead, North Somerset, BS20 7AY, United Kingdom

Type of Equipment: Personal Manufacturing Robot

Model Number: RBX01

We declare under our sole responsibility that the devices mentioned above comply with the follow-

ing EU Directives:

Electromagnetic Compatibility (EMC)2004/108/ECMachinery206/42/ECLow Voltage2006/95/EC

Common Technical EN55022:2010

**Specifications used** EN60950-1: 2006 + Amendments A11: 2009 + A1: 2010 + A12: 2011

for demonstration EN55024:2010 of compliance: EN61000-4-2: 2009

EN61000-4-3: 2006 + Amendments A1: 2008 + A2: 2010

EN61000-4-4: 2004 + Corrigendum 2008

EN61000-4-5: 2006 EN61000-4-6: 2009 EN61000-4-8: 2010

EN61000-4-11 Second Edition: 2004

Date of Validity: 1st August 2014

Design and Technical CEL Technology Ltd. C Enterprise (UK) Ltd.
Construction File Unit 1604, 16/F Nan Fung Unit 3 Harbourmead, Harbour Road,

Maintained At: 19 Lam Lok Street, Portishead, North Somerset

Kowloon Bay, United Kingdom Hong Kong BS20 7AY

Name of Authorised Signatory : Kenneth Tam Christopher Elsworthy

Position Held in Company: Chief Operating Officer Chief Executive Officer

Signatures:

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RBX01-ACC-SG