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manual written by salvatore balestrino

Italy

Hackerbot manual

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# Introduction

To ensure the packaging machine lives up to all expectations, it is important to read and comply with this instruction manual. Please store this manual near the machine for easy access, as it is an important resource for all personnel involved with the operation and maintenance of the machine.

This manual provides personnel with the information needed to safely operate and maintain the machine. It has been designed and written to be used as an instructional tool, as well as a reference tool, for everyday work. To improve understanding by all levels of users, step-by-step instructions are provided where possible. Important tags mark information about the best ways to operate the machine, and this information can be valuable in maximizing the production and longevity of the machine.

It is important that all personnel read and understand the Safety Chapter BEFORE operating the machine. Also, read all Warning and Caution notices at the beginning of each chapter BEFORE attempting to make any adjustments or changes. Warning and Caution notices are also positioned in strategic areas throughout the manual to point out any hazards that may arise from machine setup and/or adjustment procedures

Both the User Manual and the Build Manual also include an ordering guide for assistance when ordering parts. To gain the most from the machine, always use genuine parts.

Visit <http://www.opensourcehardware.it> for more information about equipment and parts.

Illustrations may be changed without notice. All dimensions and specifications are approximate and drawings are not to scale. Machines are shown without guards for illustration only. Guards are supplied and must be in place before operation. Sales are subject to prevailing terms and conditions of sale. Specifications are subject to change without notice.

## **Before you start**

Our advice is to first carefully check if all the steps are clear and you have the necessary tools

We assume that those who go to assemble the printer has a bit of practice with the mechanics and electronics.

Remains necessary that the connections of parts with voltages above 24V needs to be made to qualified persons.  
Please check and comply to your local regulations.

There is a forum dedicated to assembly help [here](http://oshw.it/projects/hackerbot/boards/1)

### **Used symbols**

 WARNING! A warning indicates the risk of (serious) damage to the user or the product if the user does not carry out the procedures with care.

 CAUTION! A comment makes the user aware of possible problems

 NOTICE: A notice makes the user aware of convenient functions and additional options.

### Tools you need to assemble the printer

* Allen key set
* Small flat screwdriver
* 10mm wrench
* Vernier caliper (small one and big one)
* Cutters

## Technical specification

* Print area: 300x200x250mm
* Modular Head. Dual extruder with second extruder interchangeable.
* High quality aluminium frame and parts
* Easy of use: Big LCD display & SD Card
* know printable materials: ABS, PLA, HIPS, Nylon, rubber\*
* 3.0A stepper drivers
* Weigth: 28Kg
* Power supply: 110V-230V 50-60Hz

# Assembly

## Machine overview

|  |  |  |  |
| --- | --- | --- | --- |
| ref | Part name | description | qty |
| 1 | EFSFB6-3030-450 | 30mm 3slot aluminum extrusion  450mm | 11 |
| 2 | EFSTB6-3030-600 | 30mm 2slot aluminum extrusion  600mm | 4 |
| 3 | EFSB6-3030-450 | 30mm aluminum extrusion 450mm | 2 |
| 4 | HBLFSB6-C | Black aluminum bracket (30mm) | 40 |
| 5 | HBLBS6 | Internal bracket 8mm slot | 2 |
| 6 | FBF33-8-30 | rubber foot | 4 |

## Bill of materials

Tools needed:

## Drawings

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