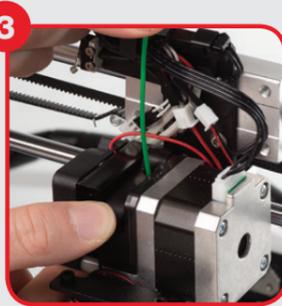


PRINTING A FILE

1. Turn on the Balco 3D Printer. Once initiated, press the dial to enter the Main Menu. Navigate to **Position > Z Pos. Fast**. Turn the dial to the right to raise the extruder to 30mm. Press the dial to return to the previous menu and select back.
2. Navigate to **Quick Settings > Preheat PLA**. Wait a few minutes until the extruder and Heated Print Bed warm up to the target temperatures.
3. Insert the end of the filament into the hole on the extruder as shown.
4. While holding the filament in place with one hand, press the dial to enter the Main Menu. Navigate to **Extruder > Extr. Position** and turn the dial clockwise. After a few centimetres of filament have been extruded, clean the Heated Print Bed and nozzle using a cloth taking care not to touch the hot surfaces.
5. Insert the included MicroSD card into the slot on the side of the control box, ensuring metal contacts are facing up. Press the dial to enter the menu system and select **SD Card > Mount Card > Print File**. Select one of the pre-loaded files.



6. Once the extruder and Heated Print Bed reach the target temperature, the printer will automatically return to the home position and begin printing.
7. Once your printer has completed printing, the Extruder Nozzle and Heated Print Bed will automatically cool down. Turn off your 3D printer and carefully remove the 3D printed object using the Scraper and gently lifting the object with your hand.



WARNING: Always take care when using the Scraper. Never use excessive force or scrape towards your hand. Always keep the Scraper level as it can damage the print mat.

Congratulations! You have successfully completed your first 3D print! Please see the manual for further information including instructions on how to print your own 3D files or visit our website for more ideas and files.

Visit balcolifestyle.com.au for step by step videos, helpful tutorials and printing ideas.

BALCO™ 3D Printer

GETTING STARTED GUIDE



Congratulations on your purchase of the Balco 3D Printer. You're now just moments away from printing your first 3D model. It's important that you follow these steps carefully to ensure correct setup of your 3D Printer.

You can also visit balcolifestyle.com.au for step by step guides on unboxing and setup, levelling, filament installation and printing.

Package Contents:

1 x Balco 3D Printer (Control Box, Extruder Tower, Heated Print Bed)	6 x Hex Bolts
1 x Filament Spool Holder	2 x Cable Ties
1 x Filament Spool Stand	4 x 10m PLA Filament
1 x Power Cable	2 x Print Bed Mats
1 x USB Cable	1 x Instruction manual
1 x 4GB MicroSD Card	2 x 0.4mm Drill Bits
1 x Scraper	1 x Getting Started Guide
1 x PTFE Tube	1 x Warranty Card
1 x Hex Key Set	



CONSTRUCT AND CONNECT



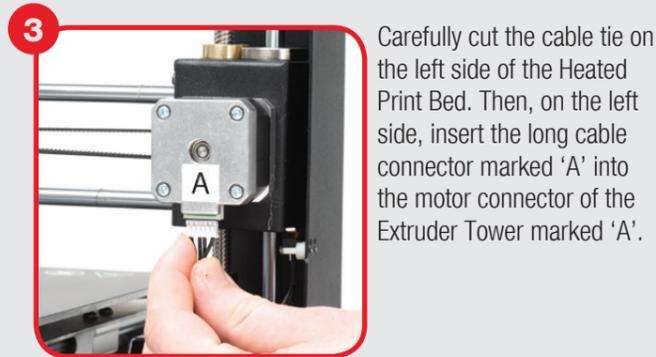
Place the Control Box, Extruder Tower and Heated Print Bed on a clean, level work space. Carefully remove the cable tie that holds the extruder in place.

NOTE: Do not pull on the black cable guides
NOTE: Ensure workspace is at least 1m x 1m



Insert the Heated Print Bed lengthways through the Extruder Tower and line up the bolt holes. Insert the two external bolts and tighten using the Hex Wrench. Place printer on its side, then insert and tighten the two internal bolts.
TIP: Raise the extruder and angle the bed for easier inserting through the Extruder Tower

CONSTRUCT AND CONNECT (CONT.)



Carefully cut the cable tie on the left side of the Heated Print Bed. Then, on the left side, insert the long cable connector marked 'A' into the motor connector of the Extruder Tower marked 'A'.



On the left side, insert the short cable connector marked 'B' into the motor connector of the Extruder Tower marked 'B'.



On the right side, insert the connector marked 'C' into the motor connector of the Extruder Tower marked 'C'.



On the left side, insert the connector marked 'D' into the connector of the Extruder Tower marked 'D'.

NOTE: Feed all cables under the base, so they do not interfere with Heated Print Bed



Remove the outer plastic nut from the Filament Spool Holder; then insert the threaded end of the Spool Holder into the large hole of the Spool Holder Stand. Tighten the plastic nuts on each side to secure the Spool Holder.



Position the Filament Spool Holder Stand on top of the Extruder Tower, then insert the bolts and tighten with the Hex Wrench.



With the power switch in the 'OFF' position, insert the power cable into the back of the Control Box and plug the other end into a mains power outlet. Turn the 3D Printer power switch on.



Once initialized, press the dial to enter the Main Menu. Rotate the dial and press when 'Position' is highlighted. Rotate the dial and press 'Z. Pos. Fast'. Turn the dial clockwise to raise the extruder so you can access the Heated Print Bed.

LEVELLING THE PRINT BED



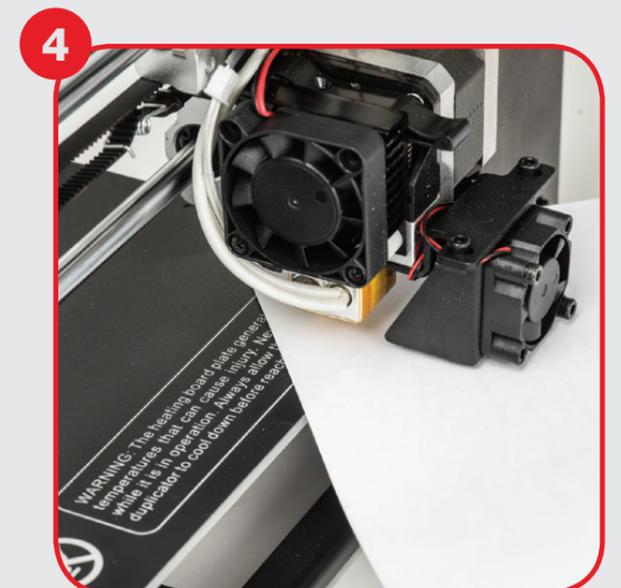
Remove tape from each corner of the Heated Print Bed. Squeeze each corner of the printing bed, and tighten each thumbscrew to reduce the distance between plates to a minimum. Wipe the top of the Heated Print Bed with a clean, lint-free cloth to ensure there are no dust particles or other objects on the surface.



Turn on the 3D Printer. Once initialised, press the dial to enter the Main Menu, navigate **Position > Home All**. The 3D printer extruder nozzle will move to the 'Home' position in the front left corner of the Heated Print Bed. Turn off the 3D printer. **NOTE:** Immediately turn off the machine if any of the motors are jamming or forcing against the frame.



With the printer powered off, rotate the thumbscrew under the corner of the Heated Print Bed to raise to a distance of 0.1mm between nozzle and the surface of the Heated Print Bed. Test the distance by sliding an A4 sheet of paper between the extruder nozzle and the Heated Print Bed. There should be very slight friction between the paper and the nozzle but the paper should still slide freely.



Push the extruder to the far right and repeat the process. Push the Heated Print Bed and adjust the back corners. Finally, move the extruder and Heated Print Bed to the centre and test. Check all points again before proceeding to the next step. **NOTE:** Ensure bed movement is not restricted by any cabling, all cables should be placed under the base

IMPORTANT NOTE: Levelling the bed is an extremely important step. If it is not done correctly every time, your prints will fail. If you have any issues levelling the bed, please visit balcolifestyle.com.au for instructional videos