Title	Polybox Installation
Models	Bolt Pro
Version	1.0
Revision date	
Expected duration	10 minutes

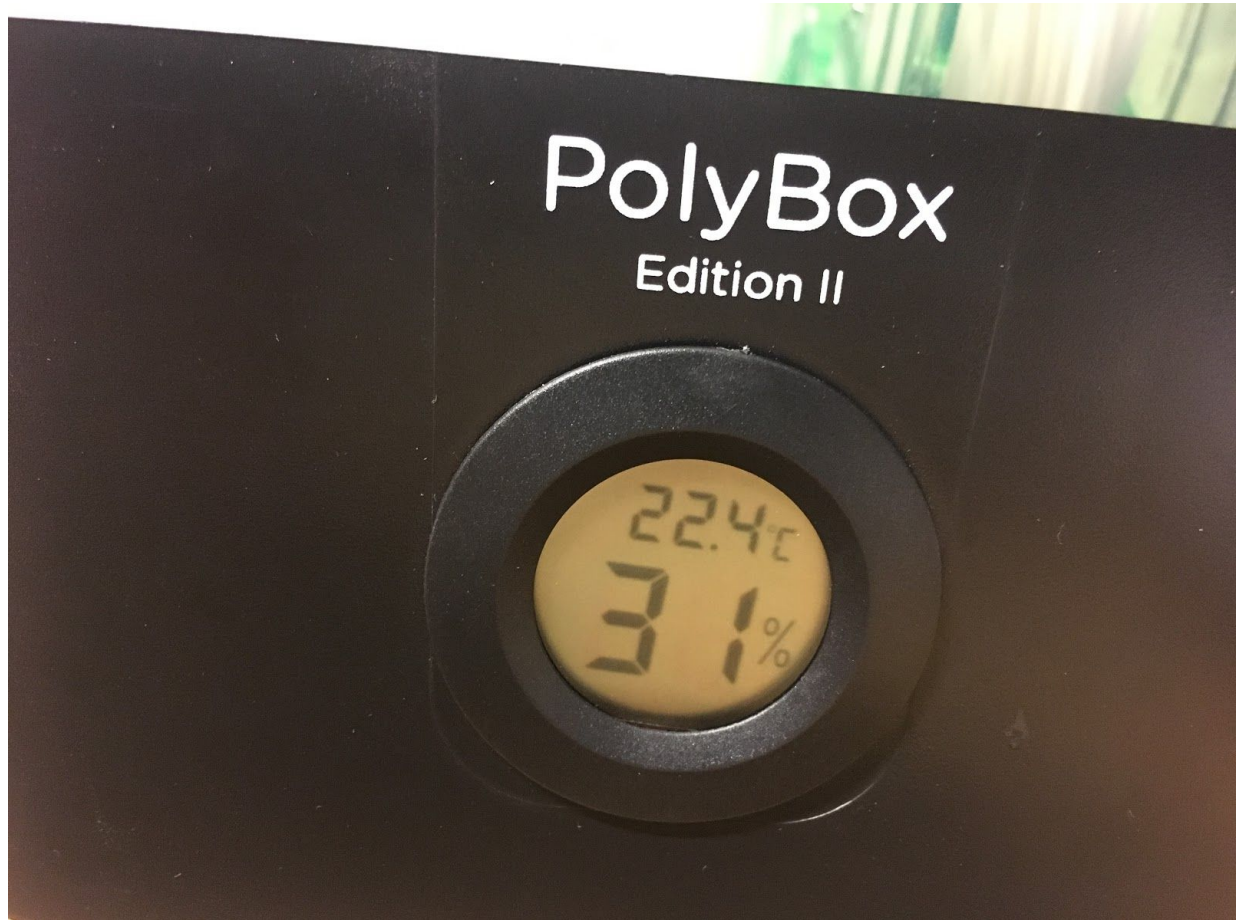| Description |
|---|
| This manual explains how to properly install the Polybox on your Leapfrog Bolt PRO. The Polybox is used for keeping filaments in a low moisture environment.

The Bolt PRO is capable of printing filaments that are placed inside the Polybox. The Filament travels thru a PTFE tube that can be inserted / enter the build volume of the Bolt PRO on the backplate of the printer.

The Polybox has a display that indicates
- Temperature of concealed area
- Moisture % of concealed area

Materials that are sensitive to environmental conditions (Like PVA and Nylon) are recommended to be stored inside the Polybox at a moisture % level of <12%

Desiccant bags need to be used for keeping the moisture % lower than the environment.

Leapfrog print settings work with support material in the left printhead. Therefore Polybox is recommended to be installed on the left printhead. |

Guideline
This manual will explain step-by-step how to properly install the Polybox. Firstly the box will be assembled. No tools are needed for this. Secondly the Polybox will be connected to the Bolt PRO. Lastly a filament spool can be inserted. Before starting the procedure, we recommend to first read all the steps. **Remove any filament that is loaded in the left printhead**

Step 1	Collecting the required items

a	Polybox base (black), lid (transparant acrylic) and desiccant bag covers (2pcs)
b.	PTFE tube 6-4mm 1.5 meters
c.	Desiccant bags
d.	Shaft (4 pcs)
e.	Bearing (8 pcs)
f.	Display
g.	3D Printed Polybox PTFE Clips (3 pcs) from the support page on www.lpfrg.com

Step 2	Install the display

a.	Insert the battery in the display
b.	Press fit the display into the Polybox base (black)

Step 3	Placing the desiccant bags and the covers

a.	Place the available desiccant bags in the front or back tray.
b.	Place the front cover (recognized by outcut) behind the display
c.	Placed the back cover

Step 4	Placing the shafts and bearings

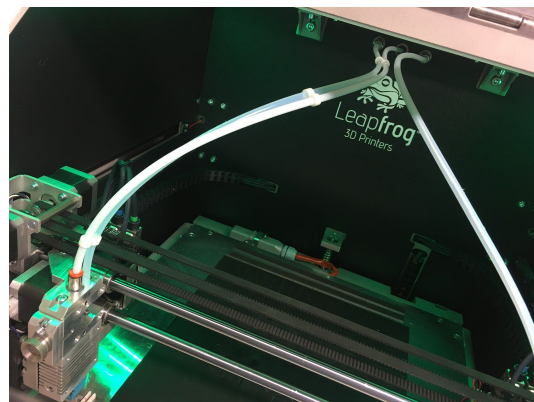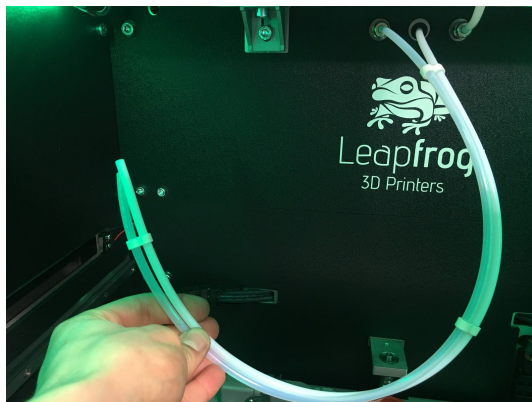| a.	Make sure each of the 4 shafts has 2 bearings on each end
b.	Insert the shafts and bearings into the designated pockets of the Polybox base. These will later be used to support / rotate the filament spool.

Step 5	Placing the Polybox

a.	Place the Polybox left or right next to the machine
b.	Place the acrylic Polybox lid on top of the base. Make sure the rubber glands are opposite from the display (closest to the back of the Bolt PRO)

Step 6	Installing the PTFE Tube

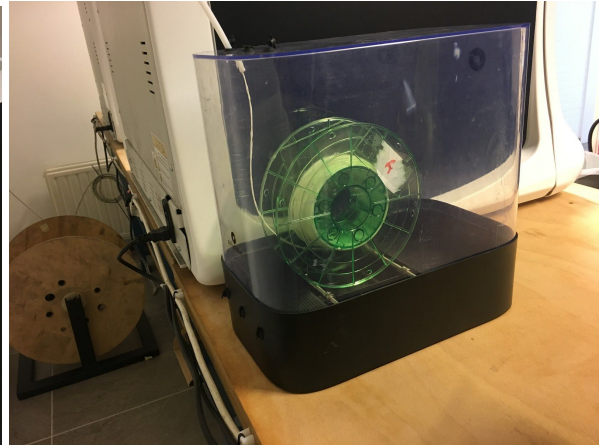| a.	Insert the PTFE tube in the Polybox as illustrated above
b.	Insert the other end of the PTFE tube thru the back plate of the Bolt PRO. Make sure the tube moves thru the rubber gland that enters the Bolt PRO build area.
c.	Make sure the length of the Polybox PTFE tube is equal to the PTFE tube of the left printhead.

Step 7	Installing the Polybox PTFE Clips

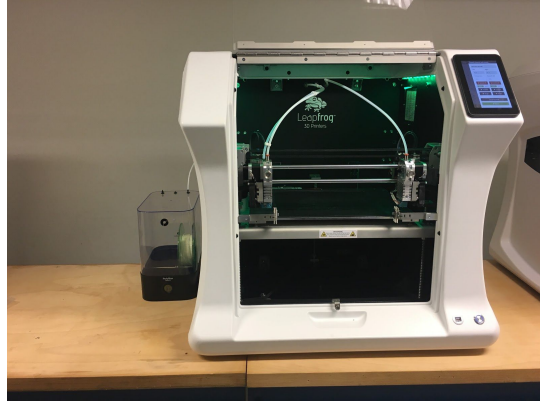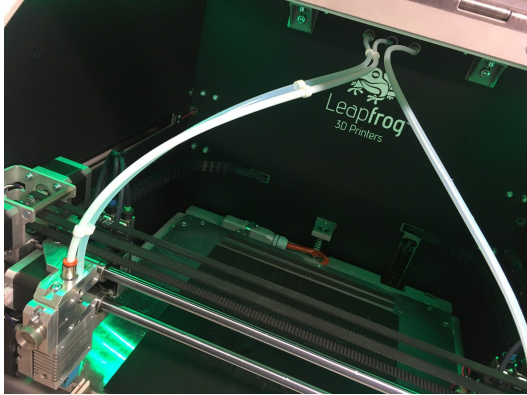| a.	Slide the Polybox PTFE Clips so it connects both PTFE tubes.

Step 8	Installing Filament

a.	Remove the acrylic Polybox lid and insert filament thru the PTFE tube
b.	Make sure the filament rolls of in clockwise direction as illustrated above

Step 9	Installing Filament

a.	Pre-heat the left printhead and load the filament that is stored in the Polybox
b.	To ensure that your filament is able to run thru the PTFE smoothly and without necessary force, we recommend manually pulling 30cm's or more to verify this. Friction will potentially stress the motor or cause interference with extrusion.
c.	Firmly press the PTFE tube in the printhead to lock the tube in position
d.	Done