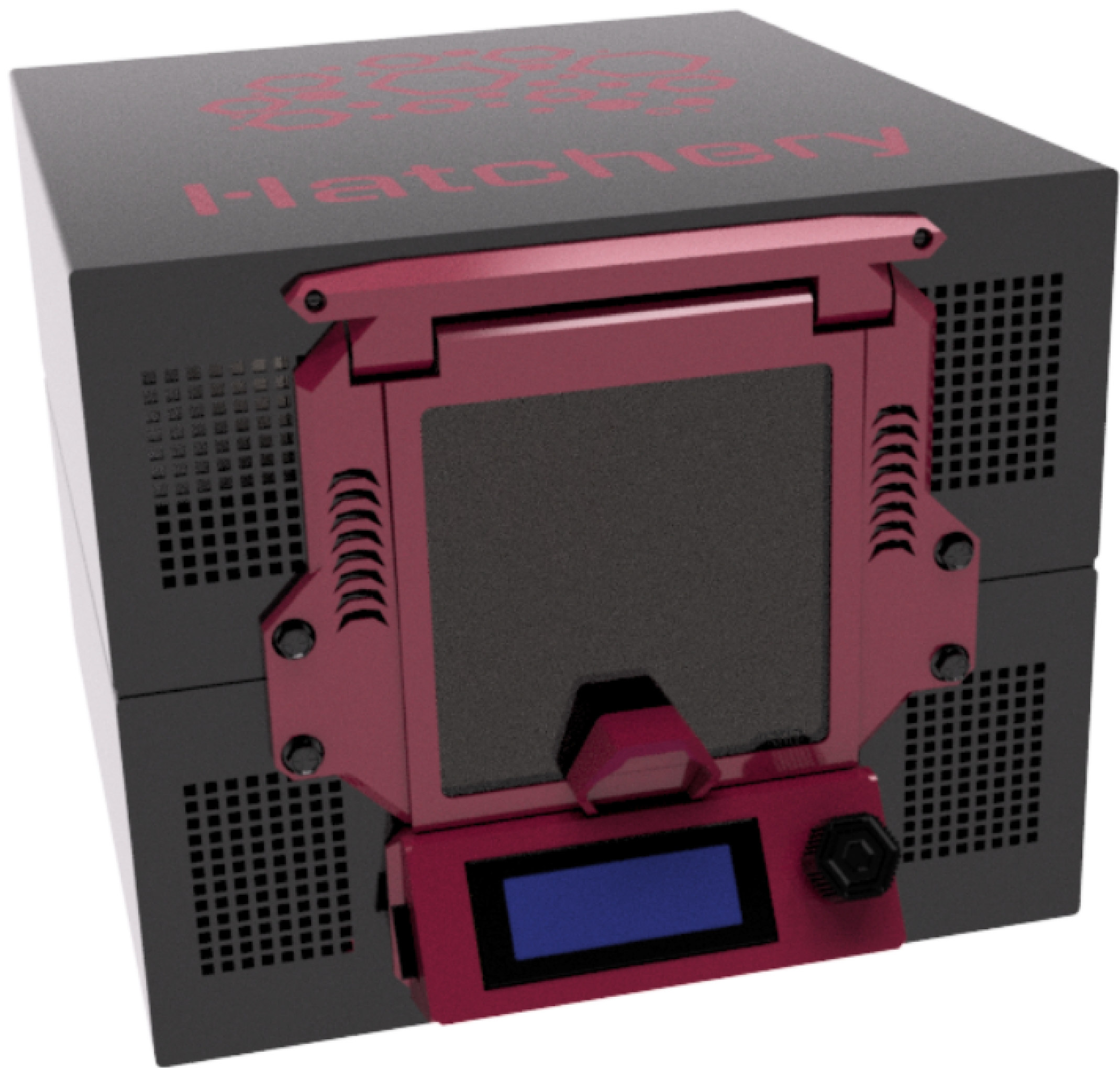# Hatchery v1.0

User Manual

Thank You

Thank you for purchasing the Hatchery v1.0

The Hatchery is a 3D printer that has been designed and manufactured in Pakistan, keeping in mind the accessibility (affordability, ease of use) of 3D printers (additive manufacturing) to creative minds of all ages.

Please understand that you own a piece of complex and advanced technology that has in place a number of safety and accessibility features, making it an innovative tool to explore your creativity in unimaginable ways.
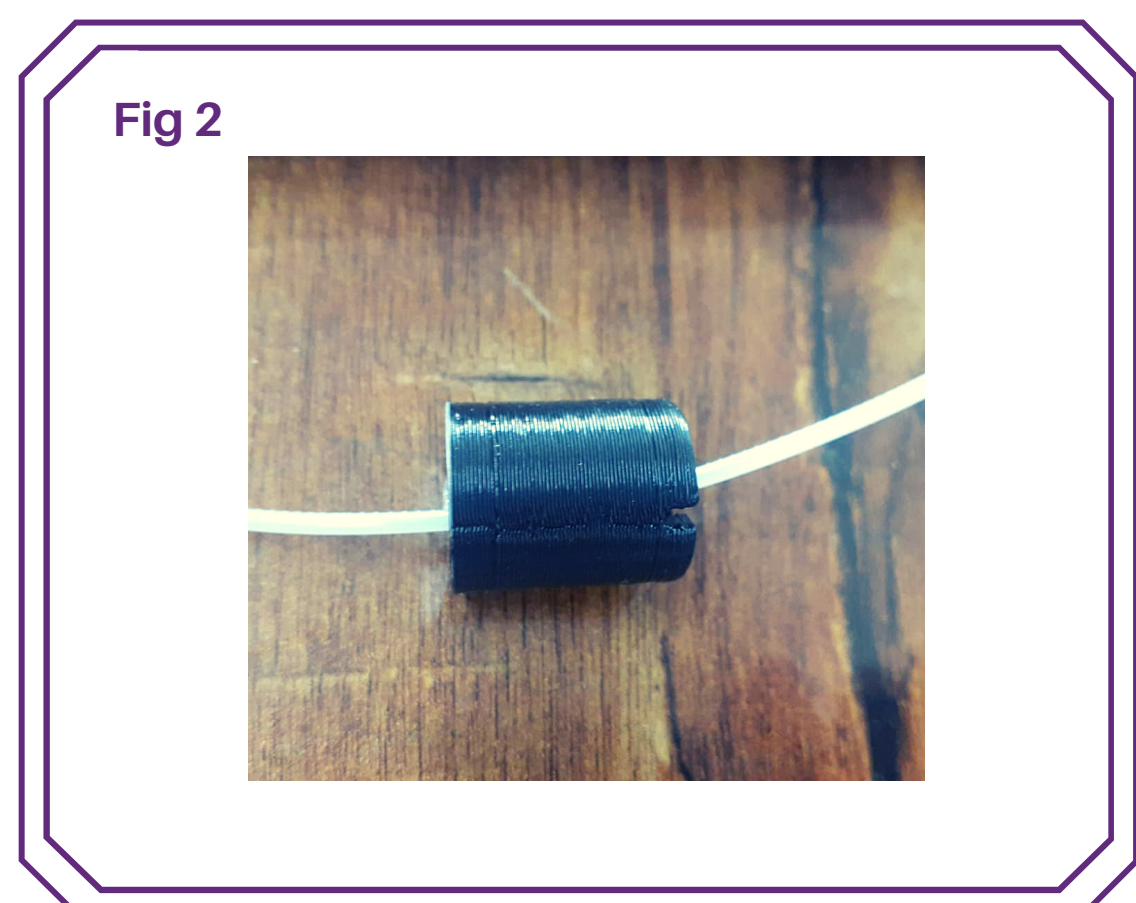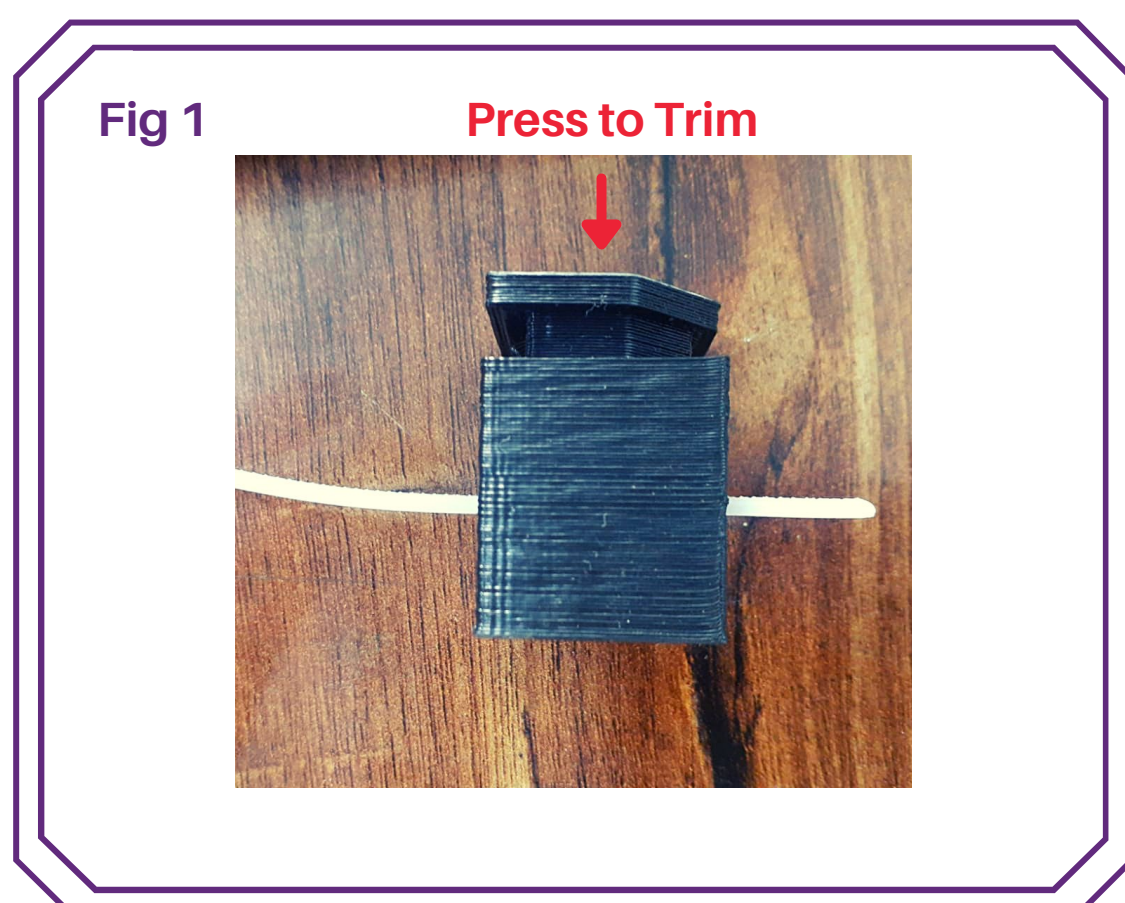
Like every technology and machinery that exists, your experience will greatly depend on how well you take care of it. We encourage you to explore, however, restricting your use to iStrings and the HatchAI Ecos models will keep your Hatchery hatching for long without troubles.

Stay safe and be creative.

Warning! Important Safety Instructions

- **CAUTION: RISK OF ELECTRIC SHOCK. DO NOT OPEN.**
  - To reduce the risk of electric shock, do not remove \ dismantle the product. There are no user serviceable parts inside. Refer all servicing to qualified personnel only.

- Use the Hatchery in a well-ventilated environment with ambient temperatures not exceeding 40C

- iString spool is clear of any entanglement

- Make sure the iString has been trimmed (using the trimmer provided *Fig 1*) and straightened before inserting it into the Hatchery

- Make sure to pass the iString through the provided dust filter (*Fig 2*). This will prevent the nozzle from clogging

- Do not open the Hatch while the Hatchery is hatching an idea. The machine has various components inside that are capable of reaching temperatures upwards of 200C

- Before Hatching an idea make sure that bed is completely clean of any dust or leftovers from previously Hatched ideas

- When removing a Hatched idea, make sure that the bed is below 40C and the Hatchery has been switched off

- When left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the machine due to a power line surge.
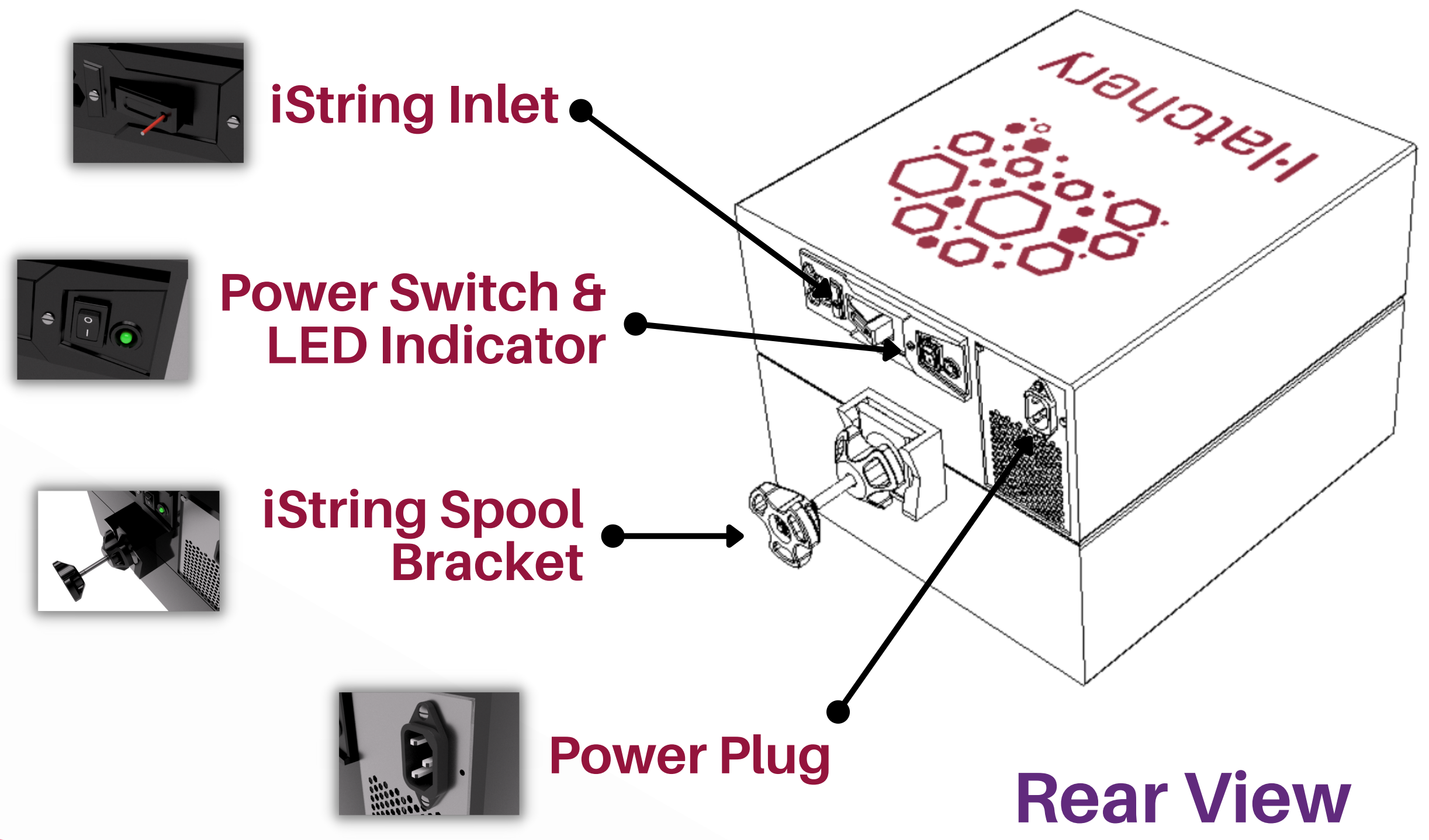
Fig 1   **Press to Trim**

Fig 2

Contents
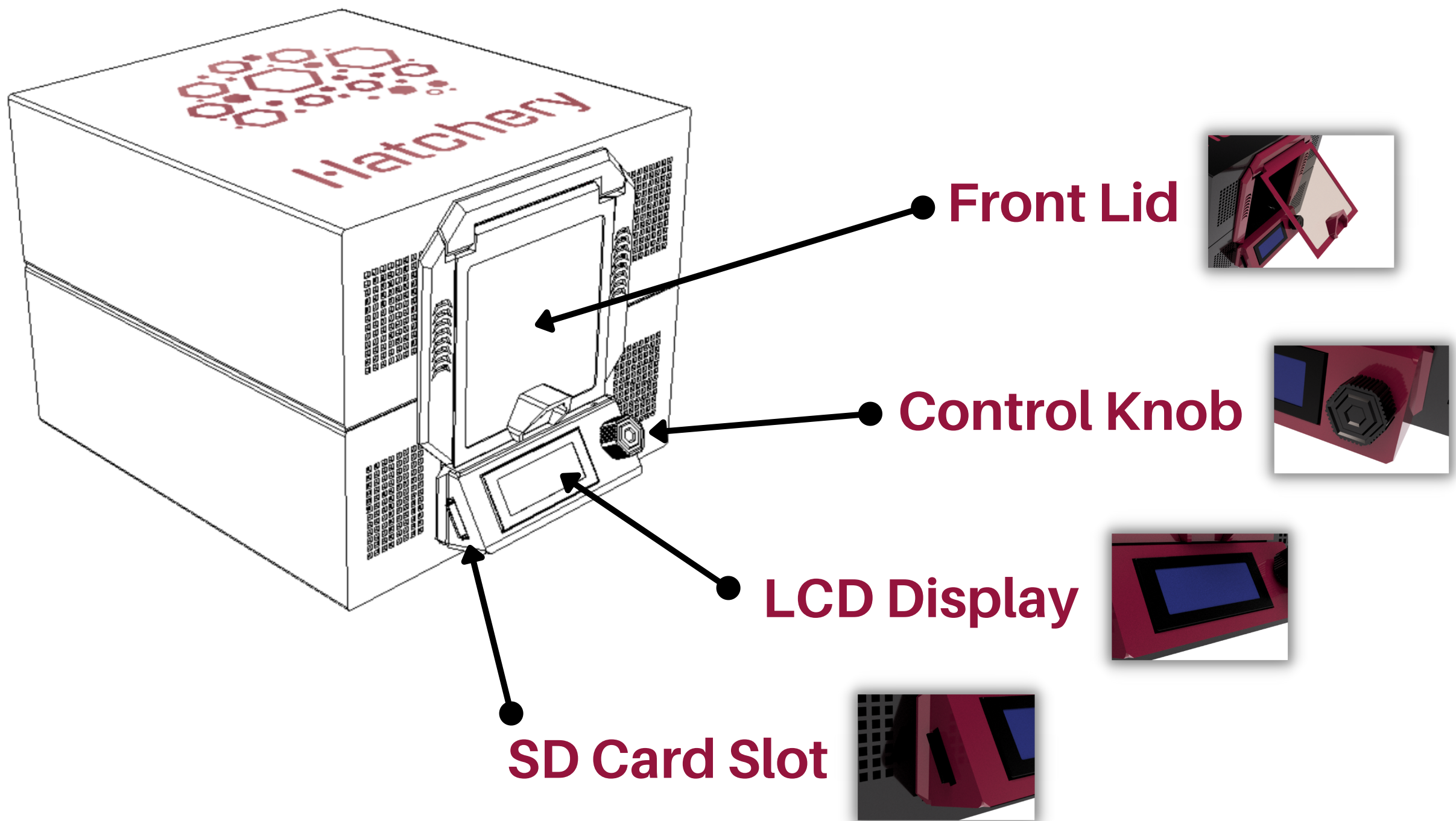
What's inside the Box?

1 - Pre-assembled and calibrated Hatchery

2 - 1KG iString (PETG Filament 1.75mm)

3 - Power Cord

4 - 4GB MicroSD card and adapter

5 - USB adapter for MicroSD card

6 - iString spool bracket (assembly required)

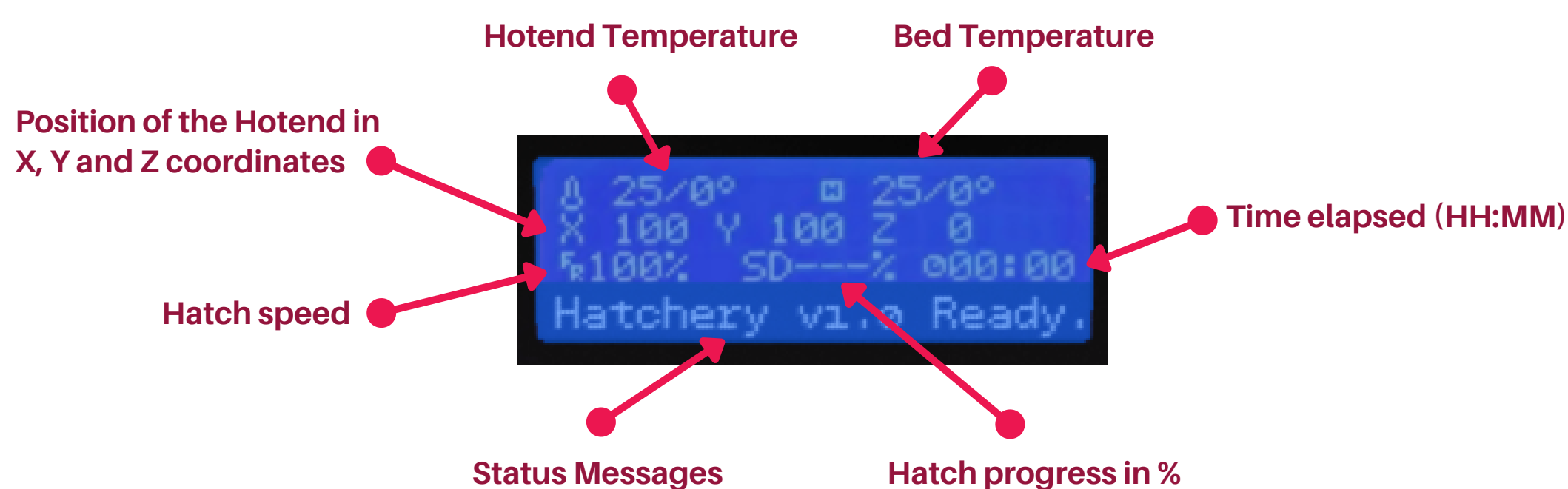7 - IString trimmer

8 - IString dust filter

Know Your Hatchery

Front View

Front Lid

Control Knob

LCD Display

SD Card Slot

iString Inlet

Power Switch & LED Indicator

iString Spool Bracket

Power Plug

Rear View

Display menu description

Hotend Temperature Bed Temperature

Position of the Hotend in X, Y and Z coordinates

Hatch speed

Time elapsed (HH:MM)

Status Messages Hatch progress in %

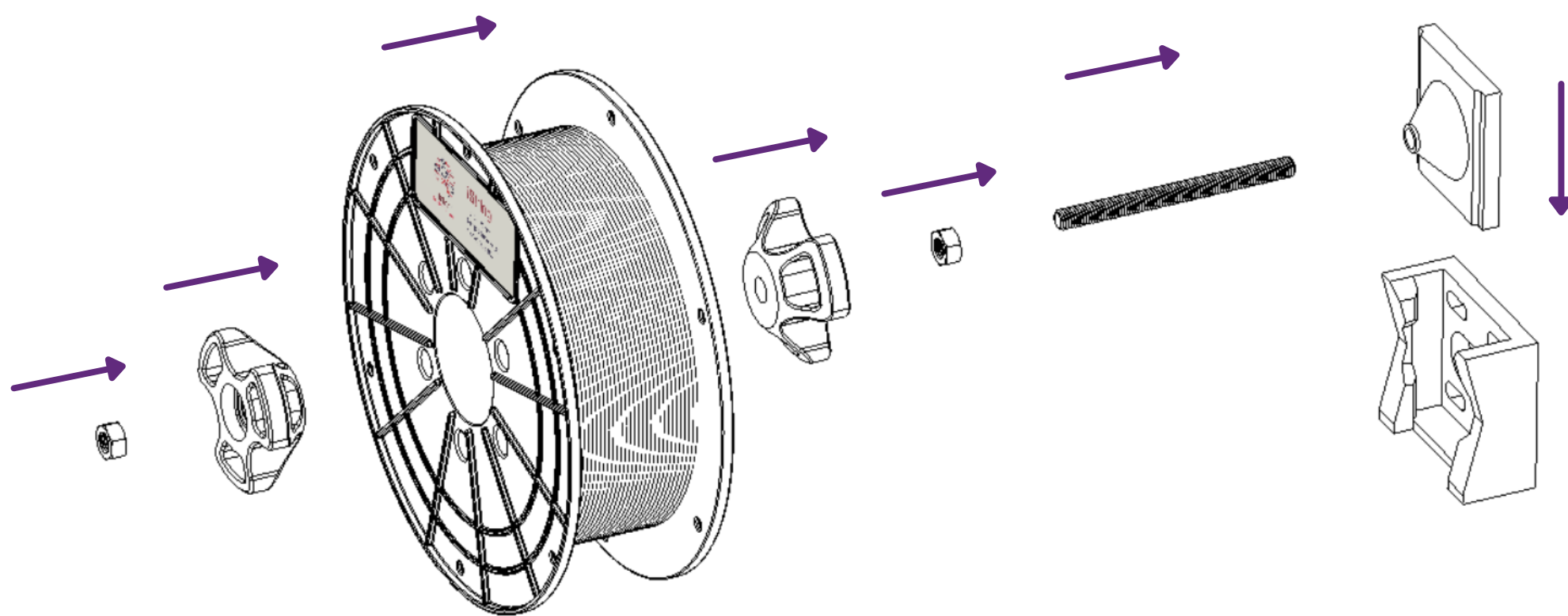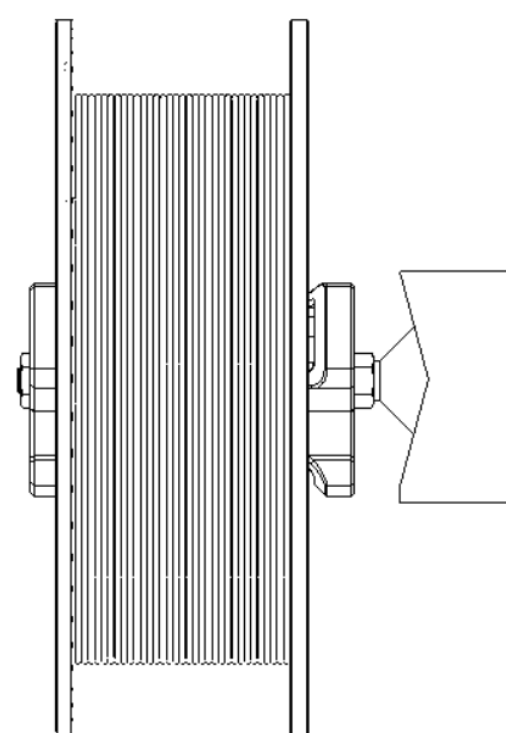| Menu	Menu Item	Description
Main Menu	Info Screen	Information screen, this screen appears when the Hatchery is idle
	Motion	This menu contains items that allow you to change motion settings such as moving the various axis, homing, bed leveling or disabling the motors (steppers)
	Temperature	This menu contains items that allow you to change the temperature or cooling settings such as Nozzle, Bed temperatures, Part cooling fan speed, Pre-heating i.e. heating of nozzle and \ or bed without Hactching
	Configuration	This menu contains items that allow you to load and \ or unload iStrings, either when the machine is Idle or during Hatching
	Change iString	This menu contains items that allow you to load and \ or unload iStrings, either when the machine is Idle or during Hatching
	No Media (or Hatch from Media)	This menu enlists Ideas stored in the SD-card, once inserted

iString
bracket assembly

Component orientation and assembly sequence

Assembled unit

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First Hatch

- Download pre-curated Ideas from https://teenyfactory.com/product-category/ideas-3d-models/ to the SD card provided

- Plug the power cable to the backside of the Hatchery on one side, and the other side into a 220 - 240V outlet

- Switch on the Hatchery with the switch next to the power cable. A green LED lights up indicating that the Hatchery is on. The display screen on the front will also light up indicating ready to use functionality

- Using the knob next to the display (*press to select, rotate to navigate*), navigate to "Change iString -> Load iString" and follow on-screen instructions. When prompted to insert the iString, load the iString into the feed hole provided to the rear of the machine. You might need to give it a slight push to load the iString

- Load the SD card in the Hatchery, in the slot provided next (left-hand side) to the display screen

- Select "Hatch from Media" on the display screen, select the model that you want to Hatch, and press Hatch

- Once the model has Hatched, wait till the bed temperature is below 40C. Simply open the front lid and remove your Hatched idea

Specifications

Physical Dimensions:	270 x 330 x 410mm HxWxD
Shipping Weight:	12Kg
Net Weight:	10Kg
Assembly:	Pre-assembled and Calibrated
Layer Resolution:	150 microns (recommended 300 microns)
Speed:	150 mm/s
Print volume:	90 x 90 x 90mm
Nozzle Diameter:	0.6mm
Extruder:	Single bowden type, Max temperature 250C
Print Bed:	Heated Bed, Max temperature 100C
Display:	Backlit LCD Screen (20 x 4 alphanumeric)
Print Material:	PETG
Voltage:	220 - 240V (max 240W)

Hatchery is a part of the HatchAI Ecos, an online shopping platform at www.TeenyFactory.com

Hatchery is designed, manufactured and tested in Pakistan by Teenyfactory. The design and specifications of the products mentioned herein are subject to change without prior notice