## －Package Content

1 3D Pen

## Product Diagram



## 【LED Messages】

－Solid red light ：
Powered on；cooled down．
－Steady flashing red light：
Idling；cooling down．
－Quick flashing red light：
Heating up．
（under cooling mode，heating will take another 15 seconds）
－Solid green light：
Nozzle is heated，it＇s ready to load／unload filament now．
（Nozzle temperature reaches $60^{\circ} \mathrm{C}$ ）
The nozzle cools down when idling for 60 seconds．To heat up the nozzle，simply press any button．
－Precaution


## BURN HAZARD

The nozzle of the 3D pen becomes heated．Do not let the nozzle of the pen come in contact with surrounding components before it completely cools．Do not touch the extruded plastic materials that have not yet cooled to prevent burns．The heated nozzle of the pen and extruded plastic materials may damage other objects，plastics， fabrics，or other materials．Avoid touching anything with these heated objects until the nozzle is completely cooled．


2 Keep the air vents open to ensure that the 3D pen works properly．
3 The heated filaments generate certain odors during the heating and extrusion process．Please use this product in a well－ventilated space． Please use PCL filaments provided by XYZprinting and follow the operations instructions when using this product to avoid product damage and bodily harm．Warranty void if non－XYZprinting filaments are used．
5 The product is fully tested on the production line． The testing material may be left in the nozzle．The color of the extruded filament might differ from the feeding filament in the first use．
6 The material in the nozzle might produce a slight cracking sound while heating up．
Operating conditions
－Temperature： $20-35^{\circ} \mathrm{C} / 68-95^{\circ} \mathrm{F}$
－Humidity： $30-60 \% \mathrm{RH}$（non－condensing）
Storage conditions（including 3D Pen and filament）
－Temperature： $10-40^{\circ} \mathrm{C} / 50-104^{\circ} \mathrm{F}$ －Humidity： $25-65 \%$ RH（non－condensing）
9 Power Requirements：USB power adapter with support for 5V 2A（Power adapter not included）
10 It is suggested to store the filament in the zipped bag after each use，keep it in a cool，dry place to away from direct sunlight．
11 To prevent accidents，do not allow young children to use and process troubleshooting unless supervised by an adult．

## －Operation

๑Loading／Extruding the filament
1 Connect the Micro USB cable to the 3D pen and the USB power adapter，and plug the power adapter to a power source．
（the LED should be solid red light）．


2 Press any button to begin heating up the nozzle（the LED indicator should be steady flashing red light）．


3 Once the heating is complete（green indicator is ON ），press the［Load Button］twice to activate continuous extrusion mode．Insert XYZprinting filament into the feeding hole．Let go of the filament once you feel the pen taking in the filament on its own．


## -Replacement/Unloading

When the indicator is Green, press the unload button to unload the filament. Once the filament has stopped retreating, press any button to stop unloading and pull out the filament. Unloading will stop automatically after 90 seconds if no button is pressed.


## $\odot$ Reminders for using the filament

1 If there is no filament left in the pen, please allow about 60 seconds after activating the feeding function to drive the filament into the nozzle of the pen.
2 You may cut the length of the filament to the desired length. The maximum length of the filament should not exceed 3 meters to ensure that the feeding process works properly. Please also make sure that both ends of the filament are trimmed.
3 For best operation, it is suggested to unload the filament left in the pen after you have finished your creation. Be sure to cut off the molten tip of the filament before reuse to prevent it from clogging up the feeding path. When cutting the filament or when you notice that the tip of the filament has been partially melted, cut the tip off the make it flat.


4 When the filament left inside is too short, the internal feeding mechanisms would be unable to push the filament. If this occurs, please insert another strand in filament through the feeding hole to push the filament out. (cut the tip off the make it flat)


5 To replace or remove the filament, please unload the filament as instructed. Do not forcibly pull the filament out from the pen as this may damage the internal components.
If you are about to change the color of the filament, please unload the filament before it goes inside the feeding path completely and becomes too short to be pushed out by the gear. When switching between materials of different colors, the tip of the new filament may mix with the old residual material. The extrusion of materials with mixed colors is normal. You may push out the filament left inside with the unblocking tool before inserting the filament of different color if you don't want the unexpected color.

## - 3D Drawing Tips <br> -Create the foundations

Tear off the films on both sides of the drawing pad before drawing. Begin your creation by drawing a base on the surface of the drawing pad or any solid object, and then you can move freely into the air after the base has been constructed.

-Move with Gravity
Heated PCL filament is soft, so it may take a while for the material to harden. When creating bridges and other 3 D structures, we recommend adjusting the angle of your drawing so that the partially molten plastic will drop down naturally and achieve a more natural finish.


## -Assemble

Molten PCL material is a good adhesion for your creation. You can use PCL material just extruded out of the nozzle to adhere drawing pieces to make them into 3D objects.


## -From 2D to 3D

3D creation can be as easy as drawing on paper. Simply place the drawing pad over the 3D coloring worksheets, and draw as illustrated, so you can easily start your 3D creation.


## - Troubleshooting <br> ๑LED indicator is off

Make sure that the Micro USB cable is properly attached to the USB port on 3D Pen and a DC 5V 2A USB power adaptor. Check that the charger is properly plugged into a power source. If the light is still off after everything is plugged in properly, please contact the customer service center for


## $\odot$ The feeding path gets clogged

To assemble by an adult, those parts which can present dangers if it not correctly assembled.

If the pen cannot extrude normally, please use the proper screwdriver ( $\bigoplus \mathrm{PH} 00$ ) to loosen the screw, and remove the back cover (by pushing it towards the back).

If the screw on back cover is stripped, please loosen the screw with the screwdriver while applying gentle pressure as you push the back cover upward.


Please unload the filament, remove all residual filaments inside. Make sure that the residual filament has been removed, reinstall the back cover, and restart the feeding process.


## - Technical Support and Tutorial Video <br> -Contact information

Solutions to Common Problems:
http://support.xyzprinting.com/us_en/Help/Faq
http://support.xyzprinting.com/eu_en/Help/Faq http://support.xyzprinting.com/global_en/Help/Faq
[US] XYZprinting, Inc
Website: http://us.xyzprinting.com
Contact Information
Technical Support: 855-999-3348 | Service Hour: Monday-Friday 9am-9pm (EST)
Online Service Desk:
http://support.xyzprinting.com/us_en/Help/tickethome
[EU] XYZprinting Netherlands B.V.
Website: http://eu.xyzprinting.com
Online Customer Service Desk:
http://support.xyzprinting.com/eu_en/Help/ticket/home [Global]
Online Service Desk
http://support.xyzprinting.com/tw_zh_tw/Help/tickethome

## ๑Tutorial video

For tutorial videos, please go to:
http://support.xyzprinting.com/us_en/Help/tutorial

