

# SKYWRITER3D

## Instruction Manual

SkyWriter Intelligent 3D® Printing Pen V3  
Congratulations on being a new owner of the SkyWriter 3D® intelligent 3D printing pen V3.  
From this moment on, the power of creation is in the palm of your hand.

For more tips about the using the SkyWriter3D® and to get free stencils downloads, please go to [www.SkyWriter3d.com](http://www.SkyWriter3d.com)

### Product Overview:



The SkyWriter3d® is Made in China  
Assembled with the finest components available.

### Features of the SkyWriter 3D® pen:

- The lightest 3D pen on the planet, only 55 grams.
- New ergonomic design fits the hand better
- New soft touch finish for nicer high quality feel
- Intelligent control, Easy operation and control.
- No Clog Nozzle with smart auto temperature control
- 8 digital speed controls for more accurate and stable extruding.
- A single press for continuous extruding flow makes it easier to create with less fatigue and greater hand freedom.
- Patented No Clog Nozzle with smart auto temperature control, with internal cooling technology for lower unit operating temperature.

### Warning!

Heat and burn hazard, Always operate the SkyWriter 3D® with adult supervision. Recommended for Children age 14 and older. The tip becomes extremely hot during and after operation and can cause severe burns. DO NOT touch the tip or surrounding area. Before storing, unload and reverse and remove the filament from the SkyWriter3D® and unplug power socket, put the device in the pen holder, Make sure the SkyWriter3D® has cooled completely before storing. The hot tip of nozzle will damage wood, painted surfaces and plastic items. Please use caution. Warning: Do not use the SkyWriter 3D® near bathtubs, showers, wash basins or near any water, this will damage the unit and may result in injury or death due to electric shock.

The SkyWriter3D® is a very advanced electronic device, use only original refill filaments supplied by SkyWriter3D®. Using the wrong filament or Misuse of the device or incorrectly selecting the wrong heating temperature will cause damage to the SkyWriter3D® and will void your warranty. Use the SkyWriter3D® in a well ventilated area.

### The SkyWriter 3D® kit includes:



### SkyWriter 3D® Specifications:

model:SL-300  
Weight:55g  
size:180(L)×24(W)×24(H)mm  
color: black  
recommended temperature:  
ABS:180-210? PLA/WOOD:160-180?  
Supported material:1.75mm PLA/WOOD/ABS  
Input rated power for adapter:100/250V 2A  
Output rated power of device: DC12V 2A 24W  
Size of printed box:198\*104\*64mm G.W.:0.42KG

### Operation rules:

Step1: plug in the power supply: Connect the power adapter with the power source, then insert the adapter into the power input hole on the back of the SkyWriter 3D® pen, the LED light will show Yellow, indicating the device is connected and in standby mode.

Step 2: material/filament selection: When plugged in and in standby mode the LED screen displays "PLA" or "ABS", press the "material/temperature selection button" for the correct choice of material, \*\*\*very important to set the correct material. ABS or PLA to avoid potential breakdown. (remark: the device can extrude wood filament, working at "PLA mode).

**Step 3: pre-heating:** After selecting the material, to activate and start the heating process press either feeding button, The SkyWriter3D® will begin to heat up to the correct temperature based on your material setting either ABS or PLA. The LED light is will be red indicating the SkyWriter3D® is in pre-heating mode during which the LED screen displays the real-time temperature. When the LED turns to green from red, The SkyWriter has reach the correct temperature and is ready to begin creating. (it takes about 30-45 seconds to pre-heat)

**Step 4: selection of extruding speed:** Press speed control button to choose the best suited extruding speed. Slower speeds offer more precise control. (The SkyWriter3d has 8 speeds, the default speed is 5 setting, 8 is fastest, 1 is the slowest.) \*\*\*You can only adjust the speed when you stop the extruding feed and then press the speed change button. The LED light is also needs to be green to allow speed adjustment.

**Step 5: filament loading:** Insert the selected material into feeding hole (see chart) at the back end of the pen, press the Forward feeding button and the filament will auto feed into the pen using the built-in feed motor. When the melted material starts to come out of the tip, it means you are ready to start to create.

**Step 6: creating your artwork:** The device is designed with 8 speed controls, please select a proper speed for best control. Note... Different colors of the same type of filament may have different melting points. Please do minor adjustments to the temperature setting to the achieve ideal flow.

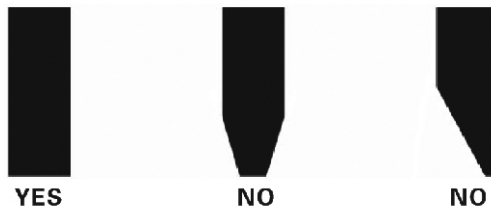
**Step 7: Continuous flow function:** The device combines functions of continuous extruding and intermittent extruding. For continuous extruding. Press the forward feed button and the pen will extrude and flow constantly, press the forward feed button again and the pen will stop feeding. The automatic feed can continue for up to 8 minutes extruding automatically until you press the feed button again to stop. For Intermittent extruding, double click the forward feed button and hold the button and the pen start to extrude, release the button, extruding will stop. For precise projects.

**Step 8: change/unload material:** When LED light is green, press and hold on the unload button for 3 seconds, then release, built-in motor will start to reverse material. When material stops moving backward, please take out the material gently from the end of the pen, then press unload button again to stop the motor. (intermittent function will automatically reset to continuous feed when left unused for 1 minute. Two clicks on the forward feed button will reset feed to intermittent operation.)

**Step 9: When you finish the project:** When your done using the SkyWriter3D®, please unload all the filament and store without filament in the pen. (remark: SkyWriter3D® is sturdy and awesome device, but just like all mechanical tools, it needs a rest to cool after one hour of continuous use, to help prolong its life span.)

### Instructions for changing material:

1. When changing filament to same type of material (ABS or PLA) but a different color. Trim the end of filament so that it is a straight blunt end. When you remove it from the SkyWriter3D it may be thin and stringy, trim end before re-inserting into the SkyWriter3D®.
2. When changing material, PLA to ABS, first unload material, restart the device (disconnect and reconnect the power supply to reset), press material/temperature button to enter ABS or PLA mode, then load the new correct filament. Trim end of filament as shown below, so it has a flat leading edge to feed into the SkyWriter3d®.



**Instructions for temperature fine adjustment:** Due to different melting point of filaments in different colors, you may need to adjust the temperature up or down a few degrees in order to improve the flow rate and greatly improve the quality of your creation of art, please follow the rules below:

1. In use, when there is a noise of Sputtering, this indicates the temperature is too high, please press material/temperature button to decrease the temperature by 8~15°C.
2. Under normal usage, when there is lots of bubble, indicates to high of a temperature, please press material/temperature button to decrease the temperature by 8~15°C.
3. When the extruded material is a dull color and the motor coughs, it indicates too low of a temperature, please press the material/temperature button to increase the temperature by 5~10°C
4. When using PLA material, the extruded material is too thin and runny, it indicates the temperature is too high, please press material/temperature button to decrease the temperature by 10~15°C
5. The normal extruded material will be smooth, without bubbles. (the occasional bubble is ok)

### Troubleshooting:

Please follow the chart below for troubleshooting instructions. If no solution is found, please contact your place of purchase.

| Problems                               | Cause                                       | Solution  |
|--|---|---|
| Power indicator does not light up      | Adapter breakdown                           | Change adapter                                    |
|  | Lead wire of socket falls off               | Solder lead wire                                  |
|  | Mainboard breakdown                         | Change mainboard                                  |
| Nozzle tip issue no material comes out | Too little extruded material through nozzle | Increase speed                                    |
|  | Nozzle clog                                 | Change nozzle heating kit                         |
|  | Lower temperature                           | Change nozzle heating kit or increase temperature |
|  | No heated temperature                       | Change nozzle heating kit or mainboard            |
|  | Motor gear grip with material but skid      | Clean motor gear and re-install                   |
|  | Fail to re-feed material                    | Unload filament and flat the end of material      |
|  | Heated nozzle in bad contact                | Unplug heated nozzle and re-install               |
|  | Motor breakdown or lead wire broken         | Change motor kit                                  |
|  | Software breakdown                          | Change mainboard                                  |
| Heated but no temperature increasing   | Heated nozzle breakdown                     | Change heated nozzle kit                          |
|  | Mainboard breakdown                         | Change mainboard                                  |
|  | Inner lead wire fallen off                  | Solder lead wire                                  |
| Too high temperature burn nozzle       | Mainboard breakdown                         | Change motherboard                                |
|  | Nozzle breakdown                            | Change heating nozzle kit                         |