



**B9Creator**<sup>™</sup>  
Manufactured in the U.S.A.

## Software Installation and Printer Setup

The B9Creator software currently supports 3 operating system variants: Microsoft Windows, OS X, and 64bit Linux. Throughout this guide we will be using windows as an example, bear in mind that using the software under other operating systems is very similar.

1. Download the software as per the operating system you are using. Software downloads can be found at [b9c.com/support/documentation](http://b9c.com/support/documentation) under Install Software. Choose the appropriate installer from the list of current downloads:
  - Windows (.EXE)
  - OS X (.DMG)
  - Linux 64 BIT (.DEB)

**NOTE: It is Important that you install the software before continuing on to step 2 below because the installation installs important Arduino serial drivers needed for printer operation.**

On Windows, Installation is as simple as double clicking the "SetupB9Creator.exe" file that you downloaded.



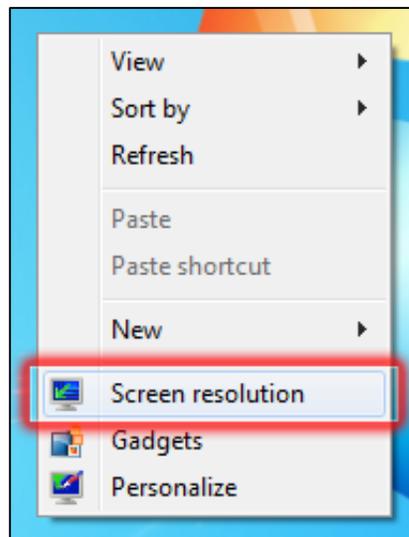
2. Because the B9Creator uses a projector, your computer must have a video output port of either VGA or HDMI and be able to be configured in an extended desktop mode.

A typical setup consists of either a laptop or desktop where the following connections should be setup:

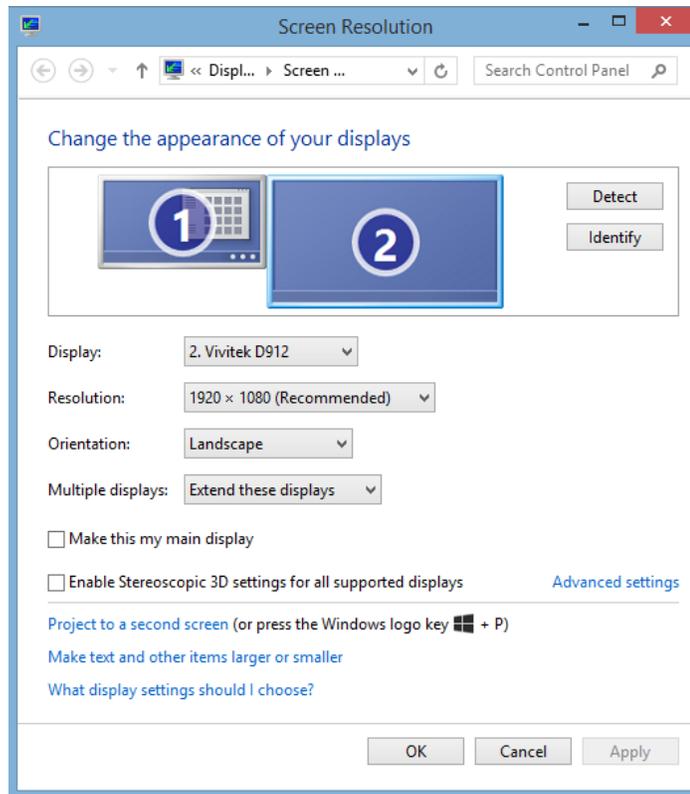
- Laptop  
An HDMI or VGA port can often be found on the side of most laptops.  
Simply connect the HDMI or VGA cord from the laptop to the bottom of the projector under the B9Creator.
- Desktop  
These often have graphics cards on rear of the tower.  
Connect one output to your primary monitor.  
Connect the other output to the bottom of the projector.

For B9Creator v1.2, the projector needs to be set as a secondary monitor input.

Monitor resolution should be at 1920×1080 pixels. To check the resolution on your windows computer, right click on the Desktop and select screen resolution:

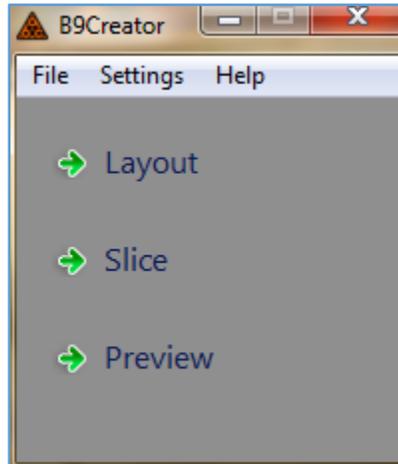


From there the screen resolution dialog will open. Be sure that the Multiple displays setting states: “Extend these displays” and that the display attached to the printer has a resolution of 1920x1080:

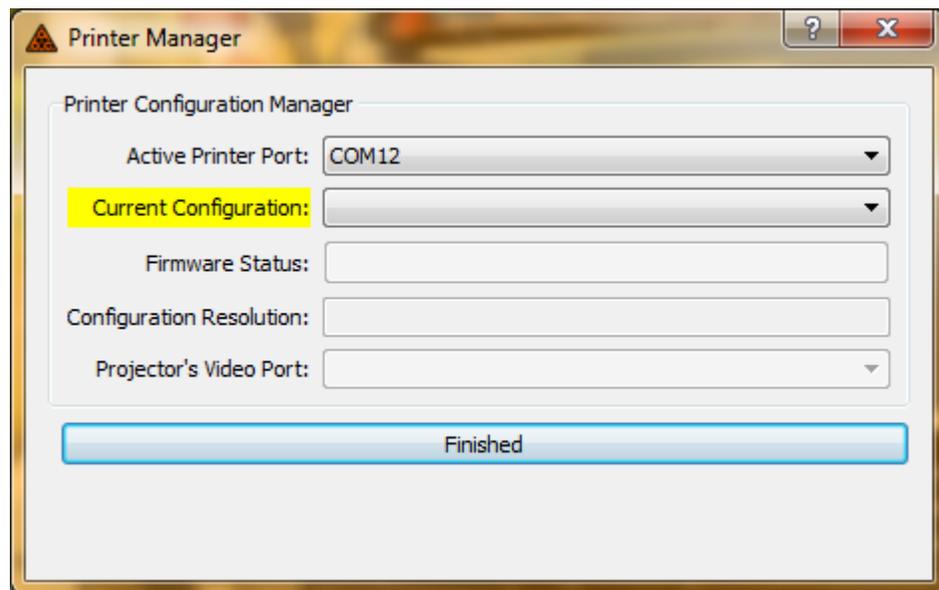


3. In addition to the VGA or HDMI cable connection to the printer, the USB cable must also be connected from your computer to the printer.
4. Now that the printer connections have been made, we need to configure the software to recognize the printer and update the printer’s firmware. This is accomplished using the **Printer Manager**:
  - a. Run the B9Creator software by double clicking the B9Creator icon on your desktop, the following main menu will be shown, this is where all software functions can be accessed:





- b. Under The Setting Menu select “Printer Management...” this will bring up the following window:



**NOTE: In Case the Active Printer port displays “NONE”, The Arduino drivers will need to be installed:**

**Under the start menu run: dpinst-amd64 or dpinst-x86 depending on your windows operating system.**

**This will only work if the USB cable is attached correctly.**

- c. Verify the active printer port is correct if there are any other com ports connected to your computer, you select the one corresponding to your printer.
- d. Select the appropriate printer configuration under the “Current Configuration” drop down.



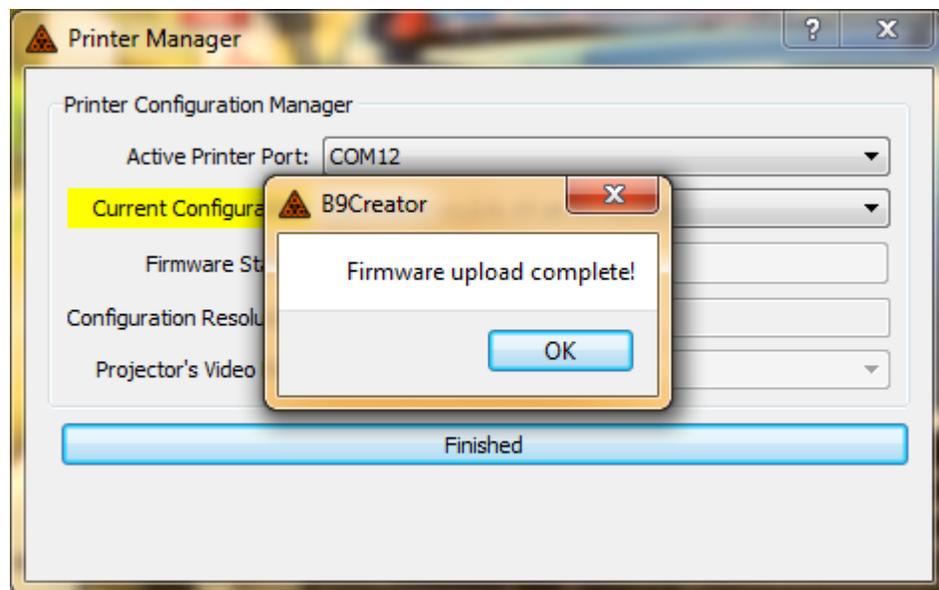
Right now there are two different printer versions (v1.1.0 & v1.2.0) with six different configurations in total. Three are for the older machine and three are for the newer machine.

V1.2.0 has 3 different projector configurations:

30µm  
50µm  
70µm

Select the entry corresponding to your printer model and what build area size/you want.

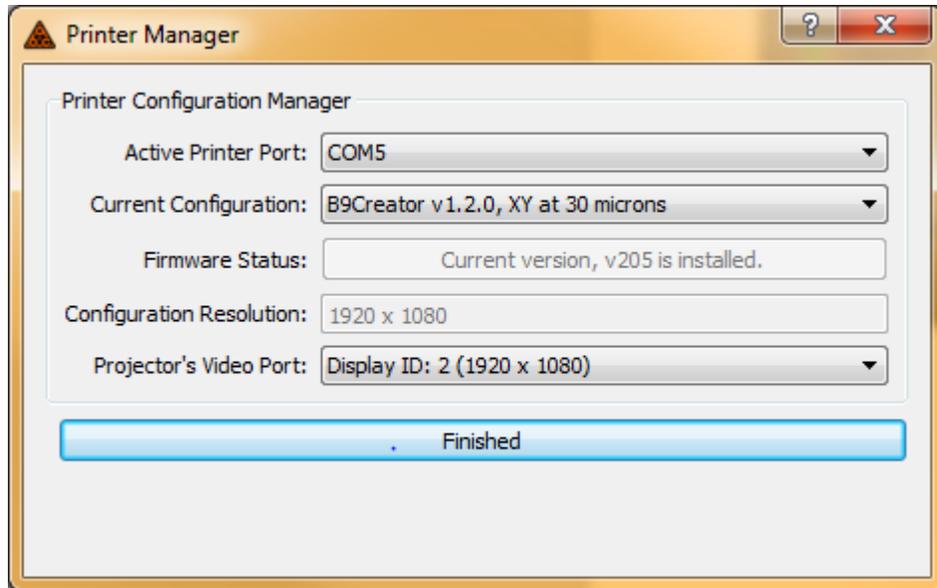
Once you have selected the configuration, a dialog box will appear asking if you want to switch configurations, press OK. After the firmware has finished uploading press OK a second time. This will update your printer with the latest version of the firmware:



- e. Next, we need to pair the printer with the corresponding projector. This will enable the software to determine which screen to display the projector grid on during print time.

Select the display number corresponding to the printer from the “Projector’s Video” drop down. For B9Creator v1.2 the resolution should be 1920x1080. Your Printer Manager should look as such with a newer firmware status version:





**Note: The “Firmware Status” Field Indicates the firmware version that is installed on the printer itself. If you disconnect the printer and then reconnect you will not have to setup your printer configuration again.**

**Note: If you need to re-configure your machine for a different build area size you will need to change the “Current Configuration” setting in this dialog as needed before running through Projector and Build Table calibrations.**

- f. Click “Finished” to return to the main menu.
5. **(For Kit Users Only!)** As a final step to the printer setup, we will load default “Printer Specific” settings into the printer. To do this, click on the “Printer Settings” item in the “Settings” menu:



Active Printer - Printer Specific Settings

Settings

These settings are specific to the currently connected and active printer.

Serial Number:	9999
Lamp Hours:	61
Balance (Left -1.0 to 1.0 Right):	-0.100
Fade (Rear -1.0 to 1.0 Front):	0.300
Machine Specific Multiplier:	0.900
Normalization Slope:	0.900
X Axis Calibration Multiplier:	1.00000
Y Axis Calibration Multiplier:	1.00000
Z Axis Backlash(mm):	0.102
Z Home Offset (steps):	8135
Slide Full Open Position (count):	3200
Slide Home Offset (count):	450

Load Factory Defaults   Reload Current Settings   Save Values   Cancel

- a. Click on “Load Factory Defaults” to reset all the values in the interface.
  - b. Click “Save Values”, this will update the printer with all the default values.
6. Your printer is now connected and configured with the B9Creator software. In the next document, we will verify the printer operation using the “Test Printer Functions” utility.

