



BB-8 BUILDERS CLUB CHARTER & RULES

V1 – Updated 10/7/2015

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I. “Mission Statement”:

The “mission” and purpose of The BB-8 Builders Club is two-fold:

1. We will promote interest in ‘Star Wars’ and its fandom by allowing others to become a part of the Maker movement. We truly believe anyone can build their own Droid of some kind (even BB-8), and will do our best to encourage anyone interested in becoming a part of this hobby.
2. We will follow the example set by Lucasfilm Ltd. by giving back to the community via fundraising charity and volunteerism at events and appearances.

II. Our Four (4) Simple High-Level Guidelines:

1. Have fun! Enjoy building and showing your custom fan-built version(s) of BB-8!!
2. Don't be a jerk to other members .
3. Don't employ "mercenary" tactics and/or use this Club for personal profit. Our spirit is one of openness and sharing.
4. Be aware that BB-8 and Star Wars is Lucasfilm Ltd/Walt Disney Company intellectual property, and respect the protection their copyrights provide.

III. BB-8 BUILDERS CLUB RULES

A. ETIQUETTE & BEHAVIOR

Don't be mean or evil. Treat everyone with respect and like how you would like to be treated. Do not engage in personal attacks and do not post obscene, indecent, hateful, offensive, defamatory, abusive, harassing or profane material.

Break this rule (i.e. be a troll or act like a jerk to other members) and you are subject to suspension and/or banning from the Club. [See IV. Rules Enforcement]

B. CLUB DESIGNS, PARTS, PART RUNS & SALES

All official club designs, schematics, plans and documentation are to be released and shared via an open-source license with Share-alike, and are to be attributed and for non-commercial use only. All members of the Club who design our make BB-8 parts are required to conform with our open-source policy and share the plans freely with other Club members.

The Club will strive to create Specifications (or "Specs") for accurate BB-8 Parts that will allow for modular development. While initial parts are being designed and made for 3D Printing, eventually parts will be able to be created in various media (Fiberglass, Aluminum, etc.)

Members will occasionally be allowed to offer individual BB-8 Parts. In specific, "Parts Runs" for those who do not have the ability to create their own parts with 3D Printers, tooling equipment, etc. These Parts Runs will be closely monitored by the Club Administrators. Though the Club will not be held liable or responsible for any transactions between individual private parties we will do our best to ensure fair trade and enforce any rules violations. Club members WILL NOT be allowed to "rip off" other members. To that end, it will be suggested that any monies required for BB-8 Parts in Parts Runs only be accepted when the items in questions are in hand and ready to ship. The prop replica hobby has a dark history of people who have accepted up-front payments for parts runs which were either heavily delayed, or never delivered at all. The BB-8 Builders Club will do its best to prevent this from happening. Further, any BB-8 parts suppliers will be required to properly accredit those who created the plans from which the parts were made. (For example, all current .STL files used for 3D Printed parts are to be credited to The BB-8 Builders Club and Michael Erwin & Tiny Panganiban).

The selling of Complete BB-8 Kits or the private commissioning of complete BB-8s for sale is strictly prohibited by both Lucasfilm/Disney and The BB-8 Builders Club.

Fail to adhere to these Design, Parts and Sales rules and you are subject to suspension and/or a Lifetime ban from the Club. [See IV. Rules Enforcement]

C. CLUB “SWAG”

The BB-8 Builders Club is based on a copyrighted property (‘STAR WARS’) and is not authorized to profit from the sales of merchandise bearing images or ideas from this intellectual property owned by Lucasfilm Ltd (a Walt Disney Company).

Promotional Materials (herein known as “Swag”) created to promote or advertise The BB-8 Builders Club will be available only to members of the Club, and at cost (which can include time spent). “Swag” is **not** to be sold to the general public outside the Club’s official website(s) or social media pages. Any use of the official Club logos will require the following text: © & ™ Lucasfilm Ltd. All rights reserved. Used under authorization.

Fail to adhere to these Club “Swag” rules and you are subject to suspension and/or a Lifetime ban from the Club.
[See IV. Rules Enforcement]

IV. Rules Enforcement

ETIQUETTE & BEHAVIOR VIOLATIONS:

- a. First Offense: Official Warning
- b. 2nd Offense: Temporary Suspension from the Club
- c. 3rd Offense: Banning (depending on the offense, this can be a timed ban, or a lifetime/permanent ban)

VIOLATIONS OF CLUB DESIGN RULES, PARTS & SELLING GUIDELINES/SWAG GUIDELINES OR LEGAL INFRINGEMENT:

- a. Suspension and/or Lifetime Ban from the Club

V. Legal Disclaimers

The BB-8 Builders Club is a not-for-profit Star Wars fan group dedicated to building life-size, working replicas of BB-8 and other Droids from "Star Wars: The Force Awakens" and the Star Wars series. Star Wars, its characters (including BB-8) and all associated items are the intellectual property of Lucasfilm. © & ™ Lucasfilm Ltd. All rights reserved. Used under authorization.

The Club itself is not responsible for the behavior and actions of its individual members and bears no liability, but Club Admins will enforce all stated rules to the best of their ability.

About the *BB-8 Builders Club*

Started in April 2015, The BB-8 Builders Club (or "BB-8 Builders") is already an active international 'Star Wars' fan group dedicated to building life-size, working replicas of the new Star Wars Droid, BB-8. Making its debut with *Star Wars: The Force Awakens*, BB-8 has already captured the hearts and minds of 'Star Wars' fans and others all over the world.

Founded by a handful of current members of the R2-D2 Builders Club, the BB-8 Builders began forming just after Star Wars Celebration Anaheim in April 2015. Ever since that seminal event (in which a working, practical BB-8 rolled out onstage during a special presentation for *The Force Awakens*) the Club has gathered detailed information & photos and has done painstaking analysis from everything available in order to generate and share official sets of Club plans that will assist members in the construction of their own BB-8.

All BB-8 plans created and generated by the Club will be open-source and publicly available for fair use.

The "mission" and purpose of The BB-8 Builders Club is two-fold:

1. We will promote interest in 'Star Wars' and its fandom by allowing others to become a part of the Maker movement. We truly believe anyone can build their own Droid of some kind (even BB-8), and will do our best to encourage anyone interested in becoming a part of this hobby.
2. We will follow the example set by Lucasfilm Ltd. by giving back to the community via fundraising charity and volunteerism at events and appearances.

The BB-8 Builders Club will use the Internet as a common means to communicate as well as gather and share information regarding BB-8 building and all club activities. The Club is organized and policed by a group of Administrators (or "Admins"), including members with direct relationships with Lucasfilm Ltd.

Anyone with an interest in BB-8 or building a Droid is welcome to join the BB-8Builders Club, and there are no Club Dues or Fees.

Online Presence

The official website of The BB-8 Builders Club will be located at www.bb8builders.club

Currently, the full website is under design and development. But to get things underway the Club is using Facebook as its defacto "home" on the internet and the main portal of communication and collaboration. The official **BB-8 Builders Club Facebook Group** can be found at <https://www.facebook.com/groups/BB8BuildersClub/>

Other Internet & Social Media:

- **Twitter:** <https://twitter.com/bb8builders>
- **Instagram:** <https://instagram.com/bb8builders/>

Original Club Founders & Administrators

Cameron Ross
Michael Erwin
Tiny Panganiban
Steele Smith
Carl Cunningham
Geir Sire
Chris James
Lars-Åke Siggelin
Børge Vasshus
Johnathan Burton
Benjamin Lewitt
Chris Lee

Research & Development, Specs and Parts Engineering

Tiny Panganiban (3D Development, Initial Testing)
Michael Erwin (R&D, Engineering, Initial 3D Printing Development & Testing)

Børge Vasshus (Alpha Tester)
Chris James (Alpha Tester)
Brian Munger (Alpha Tester)

Media & PR Inquiries

Carl Cunningham
carlecunningham@gmail.com
404-822-9658

Other

Doug Goreas (Club FAQ)
Kurt Zimmerman (Honorary First Official BB-8 Builder – November 2014)



BB-8 Builders Club Facebook Page FAQ

Welcome to the BB-8 Builders Club Facebook page. We are a collective of individuals who are interested in building a 1:1 replica of the BB-8 droid from "Star Wars: The Force Awakens". This is a place where you can ask questions, get help and offer help to other builders.

We ask that you;

- Be respectful of others by avoiding name-calling or derogatory comments. There are a lot of things to learn and not everyone here has the same knowledge or skill level.
- Please refrain from posting anything that is not related to the building or designing of BB-8 or its associated systems.
- The information and files that are posted here are for your own personal use and are not to be added too or modified for any commercial use (please see the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International Licence in the files package - <https://creativecommons.org/licenses/by-sa/4.0/legalcode>).
- Any requests for, or discussion of, building droids to sell or on consignment will be deleted without warning. Repeated violations will result in a permanent ban.

Q: How do I start building?

A: The Club is a group of people that have a common interest in building a 1:1 (full size) replica of the BB-8 Droid. We are all here to exchange ideas and tips on how to build our own versions. The group has designed some 3D print files so people can print their own BB-8 head and outer shell. The inner shell can be either a ball or hollow sphere made from Acrylic, Styrofoam, or a Polycarbonate sphere (as seen on stage).

It all depends on what type of BB-8 you wish to build. You can build;

A static one (sits and the corner and looks cool). For the body a Styrofoam ball or hollow sphere is good for this type. You can also make a paper mache Sphere as well.

A static with lights. Again a Styrofoam ball or hollow sphere body, or a paper mache one .

A static version that you wish to motorize later. An acrylic or polycarbonate hollow sphere is best or a Styrofoam hollow sphere will work as well.

A motorized droid. An acrylic or polycarbonate hollow sphere is best or a Styrofoam hollow sphere will work as well.

For the head you can get a 3D printed one, or use a half hemisphere (like a 12" world globe cut in half) or use a half of a Styrofoam ball.

It really depends on which type of BB-8 you want and what type of budget you have. That is why you can go in stages. Start of with a Static BB-8 with the plan that you want to be fully motorized in the end and add features when time and money allow.

We do not sell or allow the sale of full made BB-8's or BB-8 kits.

You can build and own a BB-8 based on pieces and parts available within the club.

Q: What can I post on the BB-8 Builders Club Facebook Page

A: Post only information and articles related to actual building a 1:1 scale BB-8. This includes, design drawings/photos, build questions etc. If your post is deemed not appropriate, it will be deleted. If you are unsure about something you wish to post, ask. You are also welcome to check out the "Everything BB-8" Facebook page.

Q: I see people who are building/printing BB-8 and say they are #notbuildingbb8. I am confused...

A: Chris James says "Right after the very first trailer where BB8 raced across the screen, I kept on being asked if I was building one and I flat out said no. And given that there's around 3 months before the next movie. I really don't think I can get one done so I'm officially #NOTBUILDINGBB8"

Q: What color orange should I use?

A: Michael Erwin and group, have tested a plethora of colors from a multitude of sources.

Here is the recommendation – (READ ME - T&M Part – Instructions Guide to 3D Printing, Assembling & Finishing V031 – page 23)

Q: Can a friend buy filament and have me print the parts for them?

A: Yes. You can also use any commercial printing service to print them (but it might be expensive).(READ ME - T&M Part – Instructions Guide to 3D Printing, Assembling & FinishingV030 - pages 6-8)

Q: I have a 3D printer and would like to make parts available to other builders. How much should I be charging for my parts?

A: Our interpretation is non-negotiable: Non-Commercial. The point is to just cover costs. The focus is to help others build their own BB-8, enjoy the community, and make an exciting new character come to life. (READ ME - T&M Part – Instructions Guide to 3D Printing, Assembling & Finishing V031 - page 6-8).

Q: Can I post on the RPF or R2Builders that I am available to print the 3-D files for BB-8 to other members?

A: The PDF guide has guidelines to follow regarding this subject. Also, we are wanting to keep all of this "in-club", and sharing our files with other groups (like the RPF) isn't kosher especially at this point. The current files have been released in good faith for people to use for themselves, not to share with the world or have open commissions, etc. We have no issue with builders printing the dome part files for others with a simple caveat, the files are still beta. We'd recommend you do it for members in this group and only the dome files at this time. This will help all of us answer questions or address issues that may arise. Please keep in mind these parts are our interpretation of what we see and what we estimated the measurements to be. If you haven't read the guide, please follow the guidelines we outlined in the guide . We also recommend you include a printed copy of the guide with the parts you print. If you'd like to invite those wanting the parts to the BB-8 Builders group, that would be fine. As we release the body and hamster part files, we'll announce their GA release here. -T&M.

Q: Is there a BB-8 "Kit" available?

A: As with R2 in the R2-D2 Builders Club & Astromech, we can also not condone the selling of complete "BB-8 Kits". Lucasfilm has made it clear for a very long time that this would not be cool... and that was BEFORE the Disney acquisition. Parts and bits here and there will be fine, but selling completed BB-8s will be a big no-no. This is a BUILDERS club, and the intent is for folks to make (or acquire) parts and make a BB-8 for themselves. Full, turn-key kits will not be permissible. Further, It's still frowned upon (and not permitted by Disney/LFL) to sell a completed R2, unless the builder is getting out of the hobby or is having a financial hardship, etc. It will be the same with BB-8. The only exception is obviously for licensees, and right now only Sideshow and eFX have licenses for full-size droids. Any requests for, or discussion of, building droids to sell or on consignment will be deleted without warning. Repeated violations will result in a permanent ban.

Q: How did you determine the size of the sphere?

A: Through careful examination and comparison of photos and local knowledge we were able to determine that the diameter was either 20" or 500mm. Further research by our technical staff determined that the correct size was in fact 20" and that a certain plastics company in California was the place to buy from. UPDATE: The actual size screen size is 506mm.

Q: Where can I get a Sphere from?

A: There are a number of places to look. California Quality Plastics has a set of polycarbonate hemispheres available (for more info check out (READ ME - T&M Part – Instructions Guide to 3D Printing, Assembling & Finishing V031 - pages 63). If you are doing a static build there are some polystyrene hemispheres available. You can also look for Acrylic spheres as well.

Q: There seem to be differences in the on screen (stage) version seen at SWCA and the one that was on display in the costume room (static).

A: Yes, we now know (from a reliable source) that there are as many as 8 different versions that were built so far by the Creature FX team in the UK.

Q: How long does it take to print all of the parts here?

A: On a Makerbot Replicator 2, using Makerbot Desktop, with the settings outlined in the Guide, right at 60 hours. It's repeatable, like clockwork. Have a different printer, or using a different slicer, or even different settings, your mileage may vary. (In some cases it could take up to as much as 80-100 hours).

Q: How long does it take to assemble, paint & weather the Dome?

A: Having done several of these now, it takes about 12 hours. It's an easy weekend project.

Q: I have read the guides and the FAQ here and I have a question that's not answered in either of the current DOME PDFs in the file URL, What do I do?

A: Great ask away, just realize you are taking time away from us working on the body files and we have a deadline #121815 to have as many rolling BB-8s as possible. Hopefully, we'll jump in to answer or maybe one of the other initial testers will help.

Q: I love this, now I want to buy a 3D Printer?

A: Fantastic! However this isn't the place to discuss that. See the general 3D printing section (Astromech.net). Or find us at a CON, we'll be MORE than glad to give you our opinions on printers and there a numerous variables. This also turns to a religious debate, but it's kind of hard to beat and Ultimaker 2 with Simply3D, from what we have seen.

UPDATE: We know that there are also a lot of other machines that will print just fine. Such as : Check the files section of the BB-8 Builders Club FB page. There you will find the following PDF: "BB-8 3D Printer List and Build Sizes – (REVISION DATE).PDF". I have also included in the file which size Dome/Ring files(1/3 or 1/4) to use with which printer.

NOTE: as long as the print area meets or exceeds the recommended build are (see next Question).

Q: How big does my printer build area need to be to print these files?

A: We recommend the following bed sizes - 22.5cm x 14.5cm x 15.0cm for the 1/4 dome STL's, and 22.5cm x 15.25cm x 15.24cm for the 1/3 dome STL's. We're trying to optimize the body files for this size as well. The smaller pieces will print on any printer. (READ ME - T&M Part – Instructions Guide to 3D Printing, Assembling & Finishing V031 - page 10).

Q: What software do I need for my 3D printer?

A: Some people have been able to use the software that comes with their printer. Things to remember are to make sure that you have the latest version. It has been noted that Cura may be problematic at this time. The majority of people printing use Simplify3D (<https://www.simplify3d.com/>) . Yes it costs (\$149.00 USD), but we are getting excellent results and there is a large user group here to answer questions on it. (Nov 2015 – There is now a vender that is offering us a discount on Simplify3D (Cubicity BB-8 Filament Bundle Flyer.pdf in the Print files section)

Q: Can I have the "native" source files?

A: Simple answer: No, why do you need them? Long answer is that we made these as integrated parts, not as large dome or body just to slice. This isn't just a 3d model. We released the STL files to keep things easy for us to support. However, if you wish to import the STL files into your favorite tool, be our guest. Modify, convert them, if you wish. However that implicitly means you agree to the CC International 4.0 BY NCSA. If you modify them, we're not here to support other people's mods to these files. Maybe later, once we get done with the Body files.

Q: My printer has huge build area and I can print everything in one piece. Can you modify the files for me?

A: One piece files are now available in the file section.

Q: Can you just modify file XYZ for me because?

A: Maybe eventually, but we have to get the body done... feel free to import and modify the STL to what you need.

Q: I have John Doe's modified version of your files, and I am having an issue with file XYZ.

A: Please contact John Doe on the issue you are having with file XYZ. We only support our files found at <http://tiny.cc/BB8Builders>

Q: I have John Doe's version of the files and you updated the T&M files. Can you contact John Doe to get them to update their files?

A: Please contact John Doe on the issue you are having with file XYZ. We only support our files found at <http://tiny.cc/BB8Builders>

Q: I don't like the Creative Commons International license, why didn't you release them under GPL or some other license?

A: To us, Creative Commons International 4.0 BY NC-SA, best served the BB8 builder community at large. This is not a debate for this thread.

Q: How are you handling QC?

A: Tiny & Michael both test print the files, once they are satisfied on the part design, they release the files to alpha testers, all with different printers. They collect feedback, reiterate the files & repeat. Once they have ALPHA test approval, they open up the files to the 20ish BETA testers. All are experienced droid builders, all highly respected in the Astromech community around the globe. Once they have general approval. They move the files to the public release share. If somehow a GA file, is found with problems, they will pull it & run it back through the cycle if needed. Right now they are in beta testing of the body part files. It's not a small task... They are talking more than 200 print hours. And they won't release the body files until complete and apply a full set of panels on a 506mm sphere. This approach has been extremely fast and agile, and close to ISO9001 compliant.

Q: I am having trouble printing the files with printer XYZ, what is the problem?

A: We don't know, please follow the recommendations in the guide. This is way off topic to be addressed in this thread. There are many Facebook groups there may be one for your printer. Check online forums for your printer. Simplify3D has a great support section with many answers to frequent problems. Also go to <https://www.facebook.com/groups/3Dprintingclub/> with over 17,000 members I am sure they can help.

Q: What filament do you recommend?

A: We don't recommend a specific filament manufacturer. However we have placed some of our notes on various experience s in the guide. (READ ME - T&M Part – Instructions Guide to 3D Printing, Assembling & Finishing V031 - page 11).

Q: The files are not in the URL, where did they go?

A: The files are there... check your end, firewall, clear cookies etc.. If you are running Windows 10, reboot, get some more San Francisco Bay coffee & try again. Remember CLOUD services, like real atmospheric clouds, are not always there. Wait a few minutes and look up again.

Q: What is appropriate to post on the BB-8 Builders Club Facebook Page?

A: Only post information or questions about building BB-8. There are other general BB-8 pages where you can find other images, caricatures, etcetera such as "Everything BB-8" or "STAR WARS: Facebook'd". Posting of spoilers is strictly forbidden and may result in your removal from the group.

Q: I do not have a 3D printer but would like to view the STL files. What do I need?

A: There a number of options available.

STL Viewers such as 3DEEFAB, Soundforge Open Source STL Viewer (note that these are only examples of the type of viewer available).

BLENDER also allows you to import and view STL files as does OPENSCAD and many other 3D CAD programs.

Repetier, as well as any 3D printer software will let you view STL files.

Q: I'm curious did anyone ever create, for this group, a "BB-8 Builders Club" membership card?

A: Although we are recognized as an official club we do not have a membership card or charge for membership.

Q: I see that there is an official BB-8 Name Badge available, what is it for?

A: The Badge is a way of distinguishing members of the club and should be worn where and when ever builders get together such as at Conventions, Builders meetings etc. The badge itself does not carry any guarantee of admittance or special treatment when worn. It is purely a way for builders to recognize each other. A word of warning – When you do wear the badge, other people will spot you and start asking all types of question about BB-8 and building one. So in essence you become an Ambassador for the Club and BB-8. It really is a lot of fun and you get to meet new people and help them get started and pass on your knowledge which is what being part of the BB-8 Builders Club is all about.

Q: Can anyone get a BB-8 Builders Club Name Badge?

A: Yes. If you are building and wish to show off your work at events, openings and conventions then you should have one. It lets people know who you are and that your part of the club. Even if you are not building you should still have a Club Name Badge.

Q: Where can I get a BB-8 Builders Club Name Badge?

A: The current authorized reseller of the BB-8 Builders Club Name Badge is <http://www.plexbydesign.com/BB-8/index.html>

Q: Is Sphero associated with the full size (movie version) BB-8?

A: Sphero had nothing to do with the BB-8 used in the movie. The Sphero BB-8 was made after the movie. Although the internals are interesting they do not translate well for use in a larger frame.

Q: How can I get in touch with other builders in my area?

A: We are now opening up the creation of BB-8 Builder Groups by Region and Country. If you would like to form a group please contact Doug Goreas for the particulars on what is required and expected. A list will be available in the FB files section with contact information for your Group as it becomes available.

Q: I have a part/item that I would like to sell to the members (Parts Run). What do I need to do?

A: You need to approach the Builders Council (BC) for approval before selling to the club. Please contact Michael Erwin. Some of the things to consider are that your part/item must be complete and ready to sell. We do not allow pre sales (pre payment) of parts/items. Once approved you will also need to post a list of people that have purchased, date paid and date shipped. It is for your protection and the club members. It also allows the BC to follow and make sure that everything matches up. We are also concerned about quality and buyer satisfaction, so we may contact people off the sales list for feedback.

Q: SWAG What is it and where can I get some?

A: From time to time the BB-8 Builders Club will release (to the Club members first), SWAG packages. Some things that have been included in the past are, A BB-8 Builders Club Lanyard, BB-Builders Club sew on patch, Limited Edition numbered BB-8 Builders Club Coin, BB-8 Builders Club dog tags. Any merchandise sold is approved by the SWAG committee and sold at minimal profit (if any). IF we do have a profit it is given to charity or to some worth cause. We will announce the SWAG offerings on the Facebook Page. I have it on good authority that there will be something available in the New Year.

Q: Where do I find the build STL files and the READ ME - T&M Part – Instructions Guide to 3D Printing, Assembling & Finishing documentation?

A: <http://tiny.cc/BB8Builders>

Q: Where do I find a list of people who are available to 3D print the files for me?

A: <http://tiny.cc/BB8Builders> - Download “BB8 Builder Printer Service Providers (Revision Date).pdf”

Q: I have a 3D printer and want to get on the BB8 Builder Printer Service Providers list. What do I need to do?

A: Print all the parts, and send a pic of them to Michael Erwin. Include in your message your hourly rate and estimated print time for the dome. You must also agree to follow the recommended settings. Once approved your name will be added to the list.

Q: Where do I find the sound files for BB-8?

A: In the files section of the BB-8 Builders Club Facebook Page – Download

- 1) BB-8 Normalized V2 Sounds.zip (Current sounds from BB-8 App. Sounds used in the movie – cleaned up)*
- 2) BB-8 moviesounds.rar (Current sounds from BB-8 App- raw).*
- 3) BB-8 MP3 Normalized.zip (Original sounds that we found before the release of TFA).*
- 4) BB8 moviesounds.RAR (updated sounds used in the TFA).*

Q: How to add lights to the BB-8 Head

A: There are a couple of options now.

In the files section of the BB-8 Builders Club Facebook Page – Download “Gizmos BB-8 Light Setup.pdf”

PLEASE NOTE – This is a Work in Progress .. check back for revisions.

Steve Strong also has a Dome Light setup that he is selling in limited runs. If you are interested in building your own based on Steve’s files, the files are available (<https://github.com/squares/BB8>).

Q: I am interested in getting my own 3D printer. Is there a list of what people are using?

A: Yes.... There is a PDF of a recent poll that asked members what 3D printer they use. You can find it in the BB-8 Builders Club Facebook Page – Download “BB-8 3D Printer Poll – Dec 18.pdf”.

Q: I would like to buy a 3D printer. What are some comparison of prices and build table sizes?

A: In the BB-8 Builders Club FB Page Files section, look agt “3D Printer Price List and Build Sizes.pdf”.

















This printers listed were taken from the 3D Printer Poll. The PDF includes Pinter Name, Price, Build Size and which dome/ring stl files will work best.

Q: Where can I get an Orange paint to use on my BB-8?

A: In the BB-8 Builders Club FB Page Files section - My Perfect Color BB-8 Offer.pdf – A special offer from My Perfect Color spray paint for Pantone 715 (which is what we believe to be a very close approximation of the Orange)

BB-8 Builders Club Drop Box Files Listings (<http://tiny.cc/BB8Builders>)


















BB8 Builders Club Files






















Name	Size	Modified
 Body 506mm Sphere Drill Jig	--	--
 Body Stage STL Files	--	--
 Body Static STL Files	--	--
 Dome STL Files	--	--
 EXPERIMENTAL	--	--
 Hamster	--	--
 Helper Disks	--	--
 PLAN B Body Panel Decals	--	--
 Ringmaster's Pitch Fork	--	--
 SoundFX	--	--
 BB8 Builder 3D Model File Checklist v14.pdf	37.78 KB	20 days ago
 BB-8 Builders Club FB FAQ - Dec.17.2015.pdf	235.6 KB	8 days ago
 BBB Builder Printer Service Providers 22-Dec-2015.pdf	30 KB	8 days ago
 Cubicity BB-8 Filament Bundle Flyer.pdf	1.12 MB	4 weeks ago
 Logic Mesh.pdf	1.01 MB	5 weeks ago
 READ ME - T&M BB8 Part Files- Instructions Guide to 3D P...hing beta v031.pdf	70.29 MB	11 hrs ago

Body Stage STL Files

Name	Size	Modified
 Orange Rings	--	--
 Panels	--	--
 Triangles	--	--
 T&M Body Panel Orientation 7-Sheet Layout.pdf	1.23 MB	5 weeks ago

Dome STL Files

Name	Size	Modified
 Lite DMM Retro Fit	--	--
 Quarter Cut STL	--	--
 BB8 Antenna 1 1of2 V3.stl	2.04 MB	5 weeks ago
 BB8 Antenna 1 2of2 V3.stl	2.04 MB	5 weeks ago
 BB8 Antenna-2 Base-1.stl	83.31 KB	5 weeks ago
 BB8 Antenna-2 Base-2.stl	83.49 KB	5 weeks ago
 BB8 Antenna-2 Top x2.stl	111.69 KB	5 weeks ago
 BB8 DMM Caster Race Lite v8.stl	2.38 MB	5 weeks ago
 BB8 DMM Caster Race v9.stl	2.16 MB	5 weeks ago
 BB8 DMM Lite v7.stl	20.43 MB	5 weeks ago
 BB8 DMM Low Lite v9.stl	19.66 MB	5 weeks ago
 BB8 Dome Panel 1 v2 mag.stl	6.25 MB	5 weeks ago
 BB8 Dome Panel 2 v2 mag.stl	4.66 MB	5 weeks ago
 BB8 Dome Panel 3 v2 mag.stl	5.35 MB	5 weeks ago
 BB8 Dome Plate Lite v8 x3.stl	1.98 MB	5 weeks ago
 BB8 Dome Ring Section x3 V3.stl	2.16 MB	5 weeks ago
 BB8 Dome Skirt 1.stl	2.13 MB	5 weeks ago
















	BB8 Dome Skirt 2.stl	2.14 MB	5 weeks ago
	BB8 Dome Skirt 3.stl	2.07 MB	5 weeks ago
	BB8 Dome Top V2 - 1mm gap.stl	4.48 MB	5 weeks ago
	BB8 Holo V6 Fixed.stl	3.19 MB	5 weeks ago
	BB8 Pie Panel 1 V2 mag.stl	1.67 MB	5 weeks ago
	BB8 Pie Panel 2 V2 mag.stl	2.47 MB	5 weeks ago
	BB8 PSI Cover v3 wo.stl	1.48 MB	5 weeks ago
	BB8 PSI Housing V1.stl	539.04 KB	5 weeks ago
	BB8 PSI Ring V1.stl	241.63 KB	5 weeks ago
	BB8 Radar Eye V12 Lens Cutting Guide.stl	178.99 KB	5 weeks ago
	BB8 Radar Eye V14 Surround.stl	6.12 MB	5 weeks ago
	BB8 Radar Internal Large V12.stl	6.02 MB	5 weeks ago
	BB8 Radar Internal Small V12.stl	6.03 MB	5 weeks ago
	BB8 Radar Surround 1of2 V15 Option.stl	4.24 MB	5 weeks ago
	BB8 Radar Surround 2of2 V15 Option.stl	2.35 MB	5 weeks ago
	BB-8 Builders Club FB FAQ V.1.4 - Oct.25.2015.pdf	226.73 KB	5 weeks ago
	Dome Logic Housings v3.stl	1.35 MB	5 weeks ago
	Dome Logic Lens v4.stl	1.22 MB	5 weeks ago
	Holo LED Mount.stl	29.53 KB	5 weeks ago
	Logic Mesh.pdf	1.01 MB	5 weeks ago
	PSI LED Mount.stl	42.22 KB	5 weeks ago

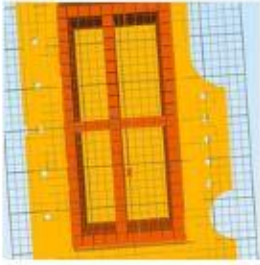
EXPERIMENTAL



Name	Size	Modified
 BB-8 Parts for Large Format Printers	--	--
 DEPRECATED	--	--
 Lite DMM Retro Fit	--	--
 BB8.bmp	3.12 KB	5 weeks ago

BB-8 Parts for Large Format Printers

Name	Size	Modified
 Dome Panel 1-Piece updated.stl	15.26 MB	5 weeks ago
 Dome Pie Panel 1-Piece.stl	3.87 MB	5 weeks ago
 Dome Ring 1-Piece.stl	5.21 MB	5 weeks ago
 Dome Skirt 1-Piece.stl	5.05 MB	5 weeks ago
 Orange Ring 1.stl	5.39 MB	5 weeks ago
 Orange Ring 2.stl	5.39 MB	5 weeks ago
 Orange Ring 3.stl	5.46 MB	5 weeks ago
 Panel 1.stl	5.07 MB	5 weeks ago
 Panel 2.stl	5.72 MB	5 weeks ago
 Panel 3.stl	5.59 MB	5 weeks ago
 Panel 4.stl	6.33 MB	5 weeks ago
 Panel 5.stl	5.29 MB	5 weeks ago
 Panel 6.stl	6.23 MB	5 weeks ago
 Triangle 1.stl	2.75 MB	5 weeks ago
 Triangle 2.stl	3.01 MB	5 weeks ago



	BB8 BMM Arm v4.stl	21.39 MB	5 weeks ago
	BB8 BMM v5.stl	13.62 MB	5 weeks ago
	BB8 Left Battery Box v3.stl	7.46 MB	5 weeks ago
	BB8 Right Battery Box v3.stl	7.32 MB	5 weeks ago
	BB8 Tilt Arm v5.stl	8.11 MB	5 weeks ago
	BMM Sides v2.stl	206.73 KB	5 weeks ago
	BMM Tube Template v2.stl	1.02 MB	5 weeks ago

Printing Tips from Josh Tenny.

Here are some of my notes on bed adhesion and keeping parts from lifting both from printing parts in general, and while printing BB-8 parts.

•Slicing Program:

I use Simplify 3D for a slicer and HIGHLY recommend it. I might even sound like I'm getting paid to advertise for it. It slices fast and has a lot of customization. It's ability to customize support structures alone makes it worth the \$150 price tag in my opinion. I know it's steep compared to free programs, but it was easy for me to learn with no real experience 3D printing and it is awesome IMHO. Even being easy to learn it offers a lot of options for advanced users. I have zero regrets buying it.

Lifting:

- As an alternative to printing helper discs on long and/or wide parts, I use the skirt/brim feature in Simplify 3D. I make it attach to the part by setting the "Skirt Offset from Part" to zero.
- I print 2 skirt layers and 5 skirt outlines on PLA for long/wide parts. I do this only on really long/wide parts. Smaller parts I don't use any skirt/brim on PLA as it has low shrinkage compared to ABS.
- I print 2 skirt layers and 7 skirt outlines on ABS. This makes ABS stick pretty hard to the surface with almost no lifting. The skirt/brim comes off easily by flexing it where it meets the part. This adds quite a bit of surface area.

Bed:

- I have 2 pieces of glass. One for ABS, and one for PLA.
- PLA - I use blue painter's tape on the glass with no glues or any other treatments. Parts stick well, and the bottom has a slight texture that better matches the rest of the part instead of a shiny surface. It also keeps the distance from the tip to the bed the same for my ABS routine so that I do not have to make any physical Z height/end stop adjustments when switching between materials.
- ABS - I use kapton tape with ABS juice. It can be a pain to apply and I have to re-apply often, but I rarely get any lifting, and when I do, it is not much. Simplify 3D allows me to adjust settings at layer heights, so I print the first layer at 110c bed temp, and after the first layer, take it down to 80c. I also use 3 outer layers and a max of 25% infill. This reduces the part's desire to want to warp in the first place. I will also note that environmental temperature is a large factor and that I made a full enclosure for my Makergear M2. I preheat the chamber with a space heater to 40c, close the door, and start the print. With the nozzle and heated bed, it generally stays at 40c +/- 2c unless the room is cold. I will be adding a heating system and temperature control to the enclosure soon. A fancy heating system helps, but simple consistency and some warmth helps a lot.

Nozzle Height and Bed Leveling:

- I like to really press down the first layer as it helps a lot with adhesion. I set my z-stop to one piece of paper bed-to-nozzle height. Simplify 3D allows me to change the first layer percentage height compared to the set layer height. I typically have this set to 75-80% of standard set layer height. This also helps press the first layer down. Note, this relies a lot on a very level bed.
- I make sure my bed is very level. This is another time Simplify 3D comes in handy. It has a bed leveling wizard that helps quite a bit. On one of my first levelings I checked about 9 places on the bed. I found that the middle was slightly lower in the "Y" direction on both sides. I used paper shims to bring that area slightly higher and get the bed really flat.

On behalf of the BB-8 Builders Group, thank you for taking the time to read through our FAQ.

A special thank you to Carl Cunningham, Michael Erwin and Tiny Panganiban for their hard work and dedication to the BB-8 Builders Club.

If you find any mistakes, deletions or additions, or comments on this FAQ please contact Doug Goreas.