

MrBaddeley's Printed Droids: Links

Facebook Group <https://www.facebook.com/groups/mrbaddeley>

YouTube <https://www.youtube.com/c/michaelbaddeley>

Patreon <https://www.patreon.com/mrbaddeley>

Store <https://www.madcat3d.com/shop>

The Community

Videos and some help

Support the projects & community

Boards, Parts, Patches and Pins

How the group works: Cool folk who enjoy printing stuff and helping people.

WE HAVE NO RULES, well except a couple 😊 – It's just being cool like the Fonzie...

The compassion, friendship, support and outright loveliness in the group has been breathtaking.

They are amazing, lovely, helpful, supportive and extremely kind.

Oh yeah, the rules, well it's easy 😊

- 1) For the new members, ask the stupid question you want to ask, (we all had them).
- 2) For the more experienced members, share what you have learnt and ask more stupid questions.
- 3) For those who have notches in your belt for the decades you have been building, remember how we all started, share the contents of your beautiful brain (and ask even more stupid questions, as the new guys may have the answer).

No spoilers, not selling stuff blah blah but keeping cool, nice and lovely is the most important part folks, it's what makes this group amazing!



The Patreon Folders

In the main patreon share the folders are:

Arduino Sketches and resources	<ul style="list-style-type: none">• This folder is for group learning and examples sketches for Arduino & other electronics
Custom	<ul style="list-style-type: none">• Specific custom requests I've had in the past, normally fixes for individual issues.
Early Bird	<ul style="list-style-type: none">• Most of the new / complex designs, always worth checking out for new builds.
Exclusives	<ul style="list-style-type: none">• Minis & Options for Astromechs or custom "non-core" droid related stuff, like Christmas, Jabba Tray etc.
Main Archive	<ul style="list-style-type: none">• This is the main Astromech (R2D2) repository, see next page for breakdown.
Pictures and Reference	<ul style="list-style-type: none">• Reference pics for painting and general finishing
Printer Profiles	<ul style="list-style-type: none">• Shared Printer Profiles
WIP	<ul style="list-style-type: none">• Work in progress, always work checking out, complete droids are in here before I've finished instructions etc.

The Main Archive - Astromechs



R2 R4 R5 R6 R7 R9 R0 BT1

In here are all the main full scale Astromechs (see above for the variants).

The build is modular and there's two main versions: V2 and MKIII.

The V2 is for a 200mm bed printer and above, the MKIII is for 500mm beds and above (The body is 463mm diameter).

Main modules you can mix and match (so V2 dome will work with MKIII body which works with V2 legs etc).

For the drive system it's highly recommended to use MKIII feet and drives on all models, other than that, the two versions are pretty similar in features etc.

The best place to start is to build and finish a dome, then the body, then the legs / feet.

Check the "Instructions" folder, there's lots of guides for the various modules.

For electronics, there's lots of options, but for the main control system check out [Padawan 360](#) and for lights check out [Teeces R2D2 lights](#)

The Main Archive - Astromechs



The MKIII Body - Features

- Optimised the large printers (500mm bed)
- Prints in 3 main rings + the Skirt
- Everything is bolted together, glue not structurally needed.
- Minimised for no supports (all body details use 70 degrees)
- Greebles optimised for minimum parts and all bolted
- Reduced filament use (under 7 rolls of filament)
- Improved utility arm mechanism
- All servo mounts part of the body
- Improved / simplified integrated hinges
- Integrated panels for breadpans, charge port & data port
- "Slide rear panels" for Charge & Data ports – easy finish & options
- 4mm threaded bars running the length of the frame for strength
- Swappable shoulder modules for further options
- Mount brackets for boards and customisations
- Swappable top ring for customised Lazy Susan support
- Magnetic catch options for charge door
- Integrated magnet hold for "restraining bolt"
- Locating latches around the rings for alignment & easy finishing



R2D2 features video

https://www.youtube.com/watch?v=6NUWktFT49M&list=PLXkMwp_Z-ip1Ty7aZZyboJRqmSAAsOQlv&index=8

MKIII and V2 overview

<https://youtu.be/VL6NjYcGnEg>

Other full scale prints – A-LT



Track Droid or ALT from Solo / Rogue one and Mandalorian.

Print bed: 500mm (It's a big droid and needs cutting even for the 500mm bed)

Overview

Simple assembly but no instructions at this time. There may be a 200mm cut coming at some point.

Features / Mechanisms

Track Drive system, using scooter motors and planetary gearbox.

3d printed lazy susan and rotating dome. Uses standard R2 electronics / drive systems (for example the Padawan 360 system).

Video of the build: <https://youtu.be/ZaJlRQms76Uk>

Folder: Early Bird folder on Patreon Drive

Patreon: all tiers

Other full scale prints – Chopper & Cheep



Chopper and Cheep from Rebels / Clone Wars

Print bed: 500mm & 200mm

Overview – Complex build, comprehensive instructions

Highly featured animated full scale and extremely accurate model. Chopper & CH33P are both virtually the same build.

Features / Mechanisms

Full drive system, 2 or 3 leg configuration, animated Utility arms, Breadpan arms, nodding dome, doors, head arms flexing and in/out, head periscope, head doors, lights, sounds, full animation system. Uses modified Padawan 360 system and custom lighting. (board on <https://www.madcat3d.com/shop>)

Video of the build: <https://youtu.be/1fs22AsGtx8>

Folder: Early Bird folder on Patreon Drive for both

Patreon: All tiers

Other full scale prints – BD1



BD1 companion droid from Jedi: Fallen Order

Print bed: 500mm & 200mm

Overview – Complex build, comprehensive instructions

Highly featured electronic animatronic “Puppet” of BD1. Designed as a “learning” build with comprehensive instructions and videos.

Features / Mechanisms

Full animated head, raising neck, 360 head movement, tilting body, twitching ears, animated eye iris, moving holoprojector, sound and controller. (rear board on <https://www.madcat3d.com/shop>)

Video of the build: <https://youtu.be/Z0usSNN0cDA>

Folder: Early Bird folder on Patreon Drive

Patreon: All tiers

Other full scale prints – DO & DO-BB1



DO from Rise of Skywalker and DOBB1 custom (inspired by concept art)

Print bed: 235mm and upwards (Prusa cut for 235mm)

Overview – Complex build, comprehensive instructions

DOv2 self balancing single wheel rolling droid with steering, head animation and sound. DOBB1 is effectively “skins” for the DO drive wheel, can we interchanged.

Features / Mechanisms

Full balancing / rolling engine, head and neck animation and sound effects. RC controlled (Resin Antenna on <https://www.madcat3d.com/shop>)

Video of the build: DO-BB1 <https://youtu.be/uXFio-ifH5I>

Video of the build: DOv2 https://youtu.be/FVC_Nhf7af0

Other videos on the YouTube channel for build support / fault finding.

Folder: Early Bird folder on Patreon Drive

Patreon: All tiers

Other prints – Minis

Approximately 40% scale various droids

Print bed: 250mm upwards (various)

Overview – Medium build, comprehensive instructions

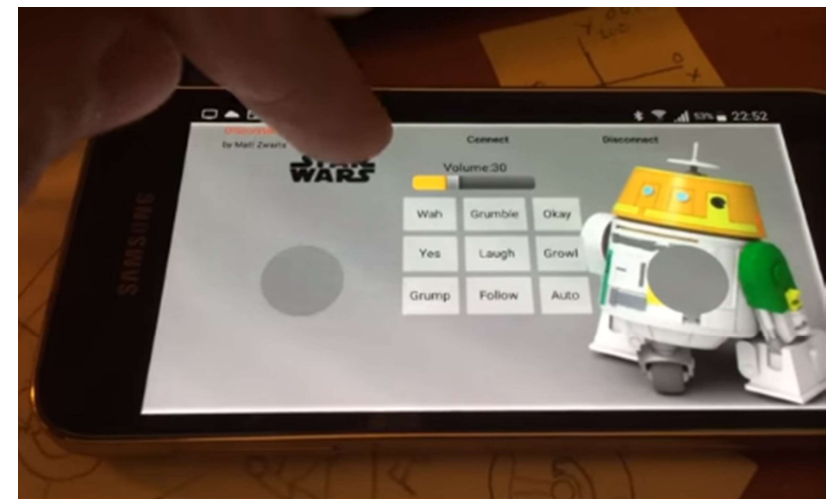
Various smaller scale droids contributed to the community by the amazing Matthew Zwarts, great learning builds and smaller scale.

Features / Mechanisms

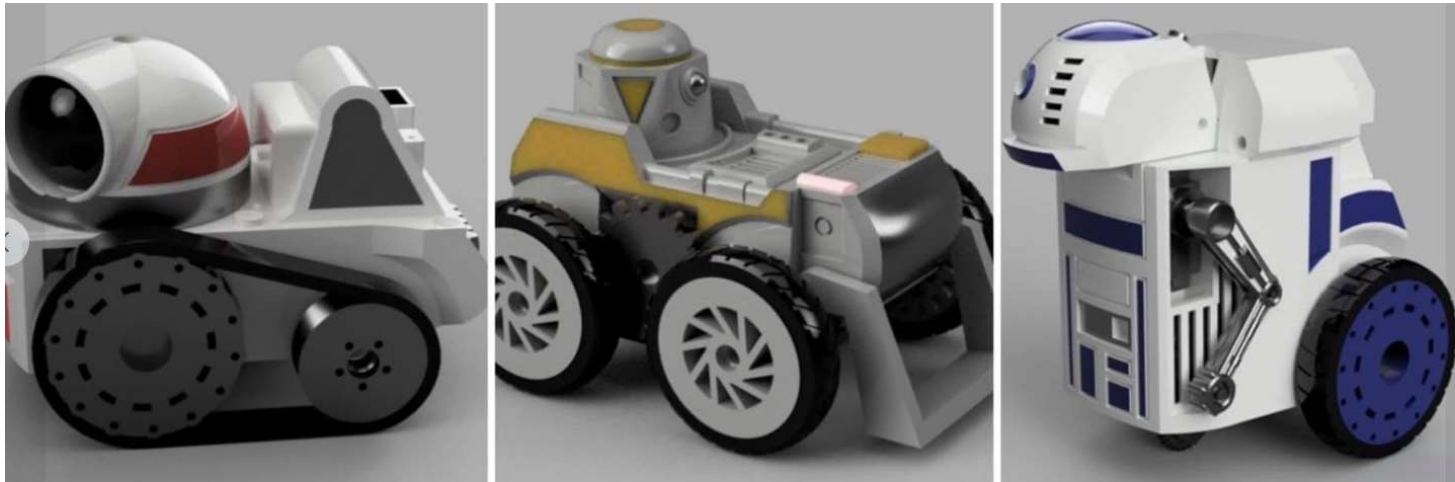
Various drive, animation and custom lights etc for each model. Smartphone (Android) controlled with App or RC control.

Folder: Exclusives on the Patreon Drive

Patreon: All tiers



Other prints – Small Microdroids



Small “weekend” builds, for learning the basics and family projects. Custom designs.

Print bed: 200mm upwards.

Overview – simple build, comprehensive instructions

Various designs (Microdroid, SU-MO and BR-US (Sumo and Bruiser), Sumo can lift and flip, Bruiser has punching arm and off switch if hit under the chin. Video <https://youtu.be/8AIS96ixPZU>

Features / Mechanisms

RC controlled, simple electronics (servo, RC and power)

Folder: Shared folder linked on the “Dedicated support” posts on Patreon (filter patreon posts by “dedicated supporter”).

Patreon: Dedicated Supporter

Other prints – Teedo



Custom, (Inspired by concept art), very popular cute small microdroid

Print bed: 200mm upwards

Overview – Simple build, comprehensive instructions

Teedo is a simple track based build with animated head.

Features / Mechanisms

RC controlled, simple electronics and quick print / build. Requires flex printing for the tracks. Very animated and great character.

Video of the build: <https://youtu.be/gMsMcMowlEU>

Folder: Shared folder linked on the “Dedicated support” posts on Patreon (filter patreon posts by “dedicated supporter”).

Patreon: Dedicated Supporter

Other prints – EY-3B (Rover or EyeBot)



Custom, (Inspired by Planet 51 Rover), very popular cute small microdroid

Print bed: 200mm upwards

Overview – Medium build, comprehensive instructions

Rover is part of the microdroid (larger and more complex end of the series). Great character with good animation.

Features / Mechanisms

RC controlled, 6 wheel drive system, fully rotating “eye”, rotating Radar and flashing headlights.

Video of the build: <https://youtu.be/o9jEFgnfTm8>

Folder: Shared folder linked on the “Dedicated support” posts on Patreon (filter patreon posts by “dedicated supporter”).

Patreon: Dedicated Supporter

Other prints – KI-TT



Custom, (Inspired by KITT), very popular rapid and fun microdroid

Print bed: 200mm upwards

Overview – Medium build, comprehensive instructions

KITT is part of the microdroid (larger and more complex end of the series). Fast and fun to play with, track based drive.

Features / Mechanisms

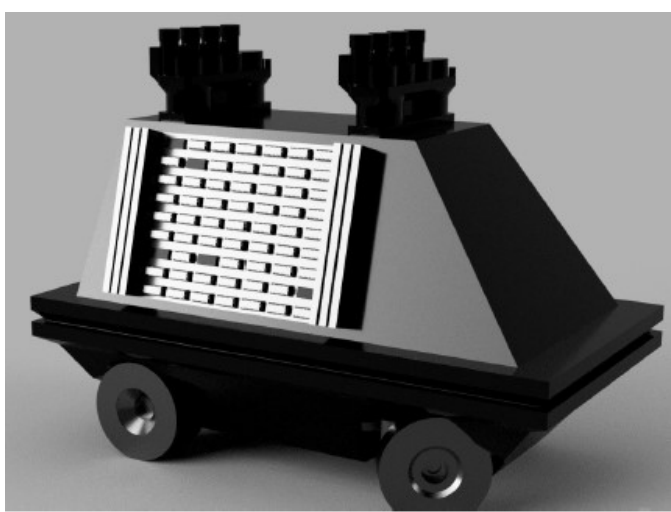
RC controlled, Track drive, “KITT” red light on the front, dome with moving “red” eye, coloured headlamps and quick drive.

Video of the build: <https://youtu.be/4mgquz08nls>

Folder: Shared folder linked on the “Dedicated support” posts on Patreon (filter patreon posts by “dedicated supporter”).

Patreon: Dedicated Supporter

Other prints – Mini-Mouse



Custom, (Inspired by Mouse Droid), Noisy & fun small build

Print bed: 200mm upwards

Overview – Simple build, comprehensive instructions

The MiniMouse is based on the popular Mouse Droid, sound and fast drive.

Features / Mechanisms

Bluetooth phone controlled or RC controlled, custom Bluetooth board for sound, drive and steering (Board is available for <https://www.madcat3d.com/shop>)

Video of the build: <https://youtu.be/-XKcWHZbD0s>

Folder: Shared folder linked on the “Dedicated support” posts on Patreon (filter patreon posts by “dedicated supporter”).

Patreon: Dedicated Supporter

Other prints – Baby Astromechs



Custom, (Inspired by all builds), various R2, R4, R5, R6, R7, R9, R0, BT1, Chopper, Ch33P, R1, Christmas R2, Snowman & Halloween

Print bed: 200mm upwards

Overview – Simple build, comprehensive instructions

The Baby Astromech series covers most of the 1:1 builds, small, quick, cute builds.

Features / Mechanisms

RC controlled, Dome spinning, full movement. Some have been (non-standard) customised with lights / sound etc.

Video of the build: <https://youtu.be/KM2n3pi-Aug>

Folder: Shared folder linked on the “Dedicated support” posts on Patreon (filter patreon posts by “dedicated supporter”).

Patreon: Dedicated Supporter



Other prints – Accessories / fun



Filament
Drawers using
old filament
spools to create
storage.

Folder -
Exclusives



Tree toppers and
Christmas tree
hangers

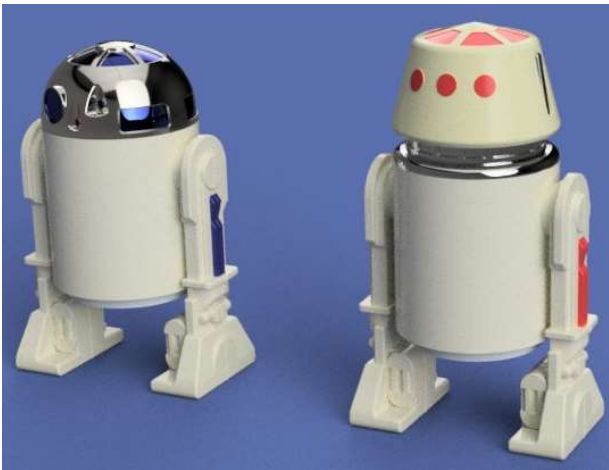
Folder -
Exclusives



Holocron
Raspberry Pi
Case (Pi4). Used
for Retropie
build

Folder -
Exclusives

Patreon: all tiers



Kenner models,
full scale
including
artwork / sticker

Folder -
Exclusives

Other prints – Accessories



Dome stand by Lars, for working on domes and display.

Folder – Main Archive – Astromech – print files - accessories



Jabba Barge Tray & Glasses for both 2 and 3 leg modes

Folder – Main Archive – Astromech – print files - accessories

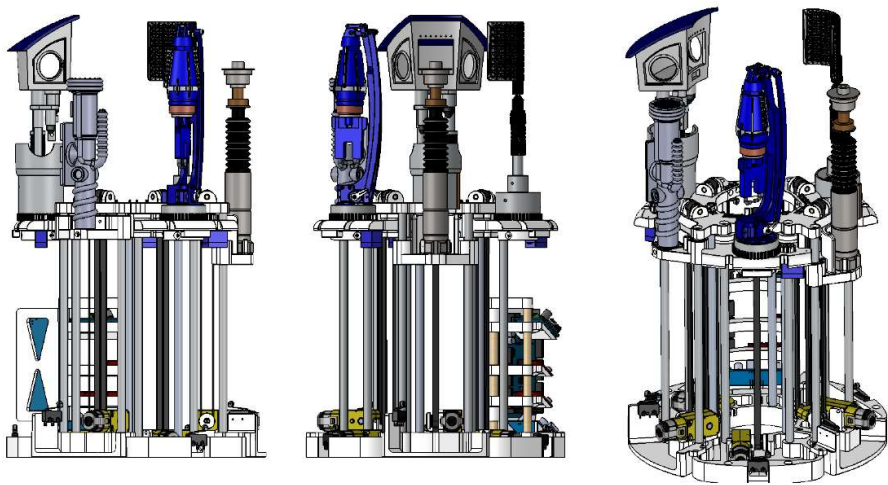
Patreon: all tiers

Other prints – Accessories



Standard and “pin display” Restraining bolt with magnet hole. (pin available on <https://www.madcat3d.com/shop>)

Folder – Main Archive – Astromech –
print files - accessories



Internal Dome Mechanism designed for the community by the amazing Matthew Zwarts

Folder – Main Archive – Astromech –
print files – Internal Dome Mechanism

Patreon: all tiers

Other prints – Resin fun



Full Astromech / Droid chess set, both Dark and Light Side designs (and optional board pieces). 12 unique droid pieces

Folder – Link in Patreon post, see below



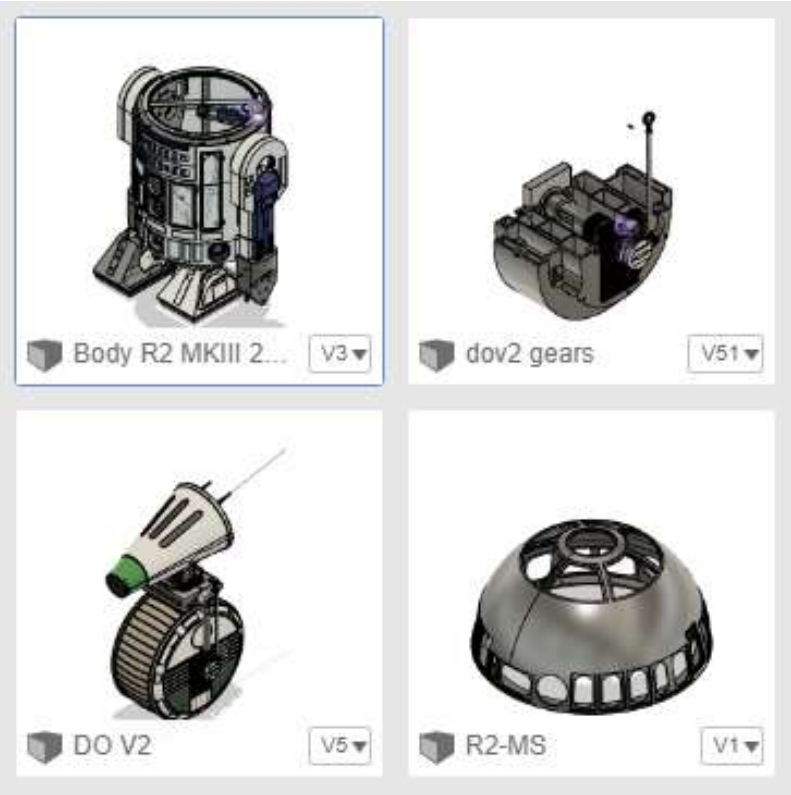
1/6th DO resin model.

Folder – Link in Patreon post, see below

Folder: Shared folder linked on the “Dedicated support” posts on Patreon (filter patreon posts by “dedicated supporter”).

Patreon: Dedicated Supporter

Source files – Fusion 360



Virtually all the models have the source Fusion 360 designs shared also.

These open in a web based interface giving full 3d reference for builds and also allow the source files to be exported in STEP or Fusion 360 format for customisation, tweaks, custom cuts etc.

Any of the Fusion posts has the historical list also.

Links: Links to web interface on the “Dedicated support” posts on Patreon (filter patreon posts by “dedicated supporter”), scroll down for “Fusion design” posts.

Patreon: Dedicated Supporter

Social & Sharing

Drinks and Droids

Started at the beginning of the 2020 Pandemic, it's a Zoom session run every two weeks on a Saturday @ 19:00. Everyone is invited, just a cool, relaxed session, grab a coffee or beer and sit back, relax and talk droids & Star Wars with like minded folk.

Check the "events page" on facebook for links and timings.

ZoomTech

Zoom Sessions, typically run on themes, Fusion 360, Electronics, 3D printing.

Generally a zoom session talking through, sharing and learning from each other. Recorded and shared on the YouTube channel.

Interview in the Shed

Interviews with cool folk from the building and movie making community. Recorded and shared on the YouTube channel. Great insight into movie making and building.