



Galactic Props

Surefire M300 Tactical Flashlight

Build Instructions

3D Printed Surefire M300 Tactical Flashlight Model Kit

Congratulations on purchasing the STL Files for the 3D printed model of the Surefire M300 Tactical Flashlight as used on the Star Wars E-22 Blaster Rifle.

All parts can be 3D printed in either PLA or ABS plastic. Pictures featured in the instructions are my actual STL files.

It is recommended you use PPE (Personal Protection Equipment) when construction this model kit. Sanding any plastic creates a fine dust which if breathed into the lungs, is not good. The dust can also get in to your eyes, so please use both a mask and goggles when sanding parts and always work in a well ventilated area. Plastic dust can get everywhere!

Tools List

The following tools are what I recommended to use to build your Surefire M300 Tactical Flashlight.

- Eye Protection - Goggles to protect your eye's from the dust particles
- Dust Mask - For protection from breathing in the dust particles
- Sandpaper - Various grades 80 Grit, 180 Grit and Wet & Dry 600 Grit (A few sheets of each)
- Small Metal Files - Various widths and shapes
- Super Glue
- 2 Part Epoxy Glue
- Small Pair of Side Cutters
- Needle Nose Pliers
- Exacto Knife
- Filler - Bondo, wood filler, fine car filler or any other type of filler that is easy to sand can be used.
- Paint - Filler Primer, Colours of your choice

3D Printed Parts List

#PART 1: Switch Body

#PART 3: LED Holder

#PART 5: Clamp Slide

#PART 7: Threaded Rod

#PART 2: Main Body

#PART 4: Flashlight Clamp

#PART 6: Clamp Base

#PART 8: Knurled Knob

Additional Hardware

1x 1w Star LED

Click Link to Purchase - [1W Star LED](#)

1 x Star LED Holder & Lens

Click Link to Purchase - [1W Star LED Holder & Lens](#)

1 x 12mm Latching Switch

Click Link to Purchase - [12mm Latching Switch](#)

1 x 14500 3.7v Battery

We Do Not Sell Batteries

Part Identification Images



Sanding and Filling

Sanding all the parts is a necessary process and the more time you take on this process the better the finish of your Surefire M300 Tactical Flashlight will be. Start with the 80 grit sandpaper and reduce the grit until a nice smooth finish is achieved.

PLEASE WEAR A DUST MASK & GOGGLES WHEN SANDING

DO NOT USE POWER TOOLS for sanding, these create heat very quickly and will soften the plastic and potentially ruin the part. Hand sanding is a much slower process but with patience and time you will achieve a really good finish ready for assembling and painting.

- Rounded Parts - Roll sandpaper around the part to sand, both inside and outside of barrels can be sanded this way.
- Flat Surfaces - Use a sheet of sandpaper on a flat surface to sand these parts.
- Awkward Shapes and Small Details - Use small metal files with shaped sides and sanding sticks to sand these parts, being careful not to sand away the details too much.

Check all parts for voids and gaps and fill with filler, once dry and hardened sand these parts again. **ONLY** move on to assembling the Surefire M300 Tactical Flashlight once you are really happy with the sanded finish of all the parts.

Painting

The main colours used for painting the Surefire M300 Tactical Flashlight is Black, but you can paint it in whatever colours you choose. I recommend using cans of acrylic spray paints, but you can also use an airbrush.

PLEASE WEAR A MASK WHEN PAINTING

- Always paint in a well ventilated area, preferably outside.
 - Wear PPE (Personal Protective Equipment) when painting.
 - Hang parts for printing where possible - This gives a better angle for painting and also for drying the parts.
 - Apply several light coats of paint rather than one thick coat and try to avoid drips and runs.
1. Filler Primer - Spray Paint all parts with Filler Primer - This will fill any very small voids or gaps. If there are still some voids and gaps fill these with filler and sand all the parts with very fine grit wet and dry sandpaper to achieve a real good smooth finish ready for the final colour.
 2. Main Colour - Use several light coats of paint allowing each to dry for the recommended time before applying the next coat. Don't rush and try to paint thick coats of paint, you will possibly lose some of the finer details on the parts, and possibly have to start the sanding process again.
 3. Allow the paint to fully dry before attempting to assemble the Surefire M300 Tactical Flashlight. I recommend at least 24 hours.
 4. Remember any parts that are required to be glued together will need to have the paint sanded first. Gluing Painted parts together is NOT recommended.
 5. Weathering - This is a personal choice. If you want to give your Surefire M300 Tactical Flashlight the weathered look check out the many videos on YouTube showing how to achieve that weather look.

Assembling the Tactical Flashlight Communicator

1. Tactical Flashlight Assembly

Screw **#Part-1 Switch Holder** into **#Part-2 Main Body**

Screw **#Part-3 LED Holder** into **#Part-2 Main Body**

Flashlight Completed

2. Tactical Flashlight Holder Assembly

Glue **#Part-4 Clamp** x 2 to **#Part-5 Clamp Slide**

Then using a good pair of scissors or metal snips cut off the excess mesh leaving around 1-2mm to fit inside the Hovi-Mix Top

Glue 2 x 4mm x 3mm Neodymium Magnets into the holes on the underside of **#Part-5 Clamp Slide**

Glue 2 x 4mm x 3mm Neodymium Magnets into the holes on the top of **#Part-6 Base** - Slide **#Part-5 Clamp Slide** onto **#Part-6 Base**

Screw **#Part-7 Threaded Rod** into **#Part-6 Base** and then Screw **#Part-8 Knurled Knob** onto **#Part-7 Threaded Rod**

You should now have a completed Comlink Communicator

Galactic Props
3D Printable Props

Website: galacticprops.co.uk

Email: info@galacticprops.co.uk