

3D Printed Comlink Communicator Model Kit

Congratulations on purchasing the STL Files for the 3D printed plastic model of a Comlink Communicator

All parts can be 3D printed in either PLA or ABS plastic. Pictures featured in the instructions are the 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 Comlink.

- 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 2: Bottom Cap #PART 5: Belt Clip #PART 8: Stand Top

#PART 3: Hovi-Mix Top #PART 6: Stand Base #PART 9: Mesh Press Base

Additional Hardware

1x 1" Inch Square Wire Mesh for Hovi-Mix Top

Buy at PropTroniX - <u>Stainless Steel Wire Mesh</u>

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 Comlink 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 Comlink once you are really happy with the sanded finish of all the parts.

Painting

The main colours used for painting the Comlink Communicator are Black and White, 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 serval lights coats of paint rather than one which 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 lights 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 loose 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 Comlink. I recommend at least 24 hours.
- 4. Remember any parts that are required to be glued together will need to have the paint paint sanded first. Gluing Painted parts together is NOT recommended.
- 5. Weathering This is a personal choice. If you want to give your Comlink the weathered look check out the many video's on YouTube showing how to achieve that weather look.

Assembling the Comlink Communicator

1. Comlink Assembly

Screw #Part-2 Bottom Cap into #Part-1 Main Body

Place #Part-4 Hovi-Mix Inner into the bottom of #Part-3 Hovi-Mix

Mount combined parts #Part-3 Hovi-Mix and #Part-4 Hovi-Mix Inner on to the top of #Part-1 Main Body

2. Making the Mesh Top for the Hovi-Mix

Place a 1" Inch Square of Stainless Steel Mesh over the **#Part-9 Mesh Press Base** and use **#Part-10 Mesh Press** with a hammer to shape the mesh

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

3. Comlink Stand Assembly

Glue #Part-7 Stand Upper into #Part-6 Stand Base

Glue #Part-8 Stand Top onto combined parts #Part-6 Stand Base & #Part-7 Stand Upper

4. Belt Clip Assembly

It you can try to print the #Part-5 Belt Clip as one piece.

If printing in one piece is not coming out well you can print in 2 pieces and glue together.

Glue #Part-12 Belt Clip Part 2 onto #Part-11 Belt Clip Part 1

You should now have a completed Comlink Communicator



Website: galacticprops.co.uk

Email: info@galacticprops.co.uk