The Liliput Folding Telescope

Miniature telescope with integrated lens protection. Smaller than a credit card. Flatter than an eraser.

Galilean lens system with OPTIMedia lenses No. 1 (f –35 mm) and No. 5 (f +65 mm)

“The smallest telescope in the world”

(Guinness Book of Records 2000)

© Klaus Hünig, Andreas Schröer (Revision of English Instructions)

Assembly Instructions

Before commencing, read through all steps carefully. Cut out the parts as accurately as possible using a sharp craft knife and a ruler, or a sharp pair of scissors. Use only standard solvent based all purpose glue, e.g. UHU, Evo-Stik Impact, B&Q Diall All Purpose Glue. **Do not use water-based glue**: it softens and warps the cardboard.

Step 1: Cut out all three parts and also cut out the inside areas, which are marked with a scissors symbol.

Step 2: Crease the dotted lines with a blunt knife (be careful not to cut into the cardboard) and then fold the dashed ones – – – – – – backwards (away from you) and the dotted ones forwards (towards you).

Step 3: One of the two lenses is a magnifying lens. It has a rim running around its convex curved side. Glue it over the bigger hole on the black reverse side of the cardboard, rim down (Fig. A, left lens).

Step 4: The other lens is a reducing lens, with a concave curved side. Glue it on the black reverse side of the cardboard over the smaller round hole, flt side down. Caution: Do not apply glue on the lens itself! (Fig. A, right lens).

Replacements for lenses which have accidentally been smeared with glue can be ordered from AstroMedia! (www.AstroMedia.co.uk, article No. 301.OM.1 for the reducing lens and 306.OM.5 for the magnifying lens).

Step 5: Fold back flp and glue it under the back of the opposite edge. Glue flps ! and under the left and right edges of the side with the reducing lens. When pushed together, the two oval-shaped cutouts should be folding inwards.

Step 6: If viewed from the side the telescope should look like the example in Fig. B (except for the top and bottom covers, which will follow in Step 7) and it can be neatly folded together. If you press on the outer edges it unfolds again. The pressure on the outer edges also regulates the distance between the lenses and thus makes it possible to focus the telescope.

Step 7: Finally the top and bottom covers are glued on. They protect the lens when the telescope is folded and at the same time they reinforce the folds on the outside edges. Allow to dry completely, preferably whilst folded together. Be very careful when opening for the firs time.

Congratulations! You have now completed your own Liliput Folding Telescope.

Fig. A (shows where the lenses are to be glued on)

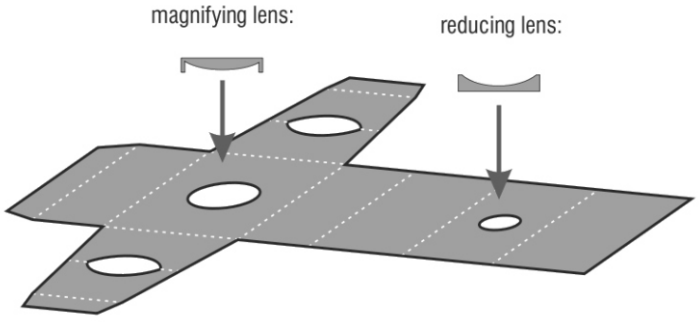
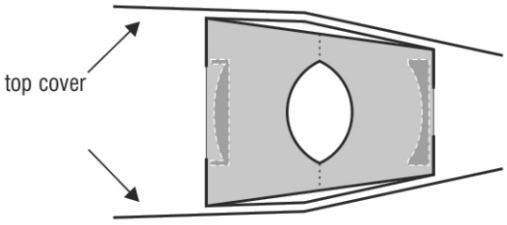


Fig. B (cross-section of the completed telescope)



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