

Dear Andreas,

I have recently finished building the Historical Galileo telescope kit and the end result is very pleasing indeed.

My overall experiences during construction are as follows :

1. Although all the tubes are printed in black on the internal surfaces, these surfaces are still much too reflective - looking through the ocular tube showed six white bands of reflected light, with more reflections visible from the interior of the main tube and objective lens tube. This resulted in a rather confusing view when pointing the telescope at a bright object and reduced the contrast noticeably. I remedied most of this by lining the ocular and objective tubes with black flocked paper, but was unable to do anything with the main tube because of the glued-in central stiffening pieces. However, lining the accessible tube has resulted in greatly improving the telescope's performance. If I were building this kit again I would line all the tubing with the flocked paper before assembly.
2. The piece C5 which is intended to join the two main body tubes is too short: when pushed half way into one tube only 5 or 6mm protrudes for gluing into the adjacent tube. The illustration Fig. 6 shows this piece as being longer than it actually is. I used a 50mm length of thin-walled card tubing to replace C5.
3. When assembling the outer casing on the main tube sections it is not easy to ensure that they butt up together exactly without some minor irregularities. To eliminate this I used lengths of scrap gold-printed card left over from the kit but they really need to be slightly wider. Perhaps a future kit could include two lengths sufficient to encircle the tube, about 4mm or so wide.
4. The recesses into which both lenses are glued are noticeably larger than the lenses themselves, requiring packing pieces made from scrap pieces of card.
5. Instead of gluing the objective lens to the exposed edges of the hexagonal tube sections I made an annular ring from black card, stuck this on top of the exposed card edges - this left a flat surface on which to glue the lens.
6. I found that the two lens cell backing rings A8 and B8 had central holes which were at least 1mm larger than the tube over which they fitted. This meant that when they were glued to the back of their respective lens housings an annular gap was visible exposing the white card interior structure. I filled the gaps by cutting scrap lengths of 'red leather' card from kit off-cuts and gluing these in place.

As mentioned earlier, the end result is quite impressive. It's probably just as well that you did not copy the original exactly - it was hard enough trying to get Jupiter and even the Moon into the field of view with a magnification of 12x, let alone 20x!

Regards, Lewis

(regarding the last point: using the telescope is much easier with our Round Tripod Adapter 258.FSR that you can find on our Components page)