

# The Sun Movement Simulator (116.SNG)

**This kit contains:** 1 printed cardboard sheet, 1 brass clip (sun)

**Assembly instructions (please read before you start):**

**Step 1:** Cut out the two halves of the meridian disk [A1] and [A2] (Meridian-Scheibe). Score the dashed lines with a blunt knife and fold these parts towards you.

**Step 2:** Glue the two halves precisely on top of each other, BUT NOT the two quarter disks marked  $\blacklozenge$  and  $\blackstar$ . After the glue has set, move the sun arc back and forth to make it pivot easily.

**Step 3:** Cut out the horizon [A3] (Horizont). It has a narrow slit at the north point that is 6mm long and 0.5mm wide. Take care that you don't cut it any wider.

**Step 4:** Now fold the two quarter disks marked  $\blackstar$  outwards at right angles and do the same with the quarter disks marked  $\blacklozenge$ . The latter should now form a half disk onto which the horizon is glued. The slit at the north point has to fit over the latitude scale. Make sure the horizon sits symmetrically on the two quarter disks and that you can set it to all latitudes by tilting it back and forth.

**Step 5:** The pivoting sun arc is slightly narrower around the date scale. Push the brass clip over the scale so that the knob faces inwards. Bend the ends of the clip around the scale so that it can still move up and down and you can adjust it to all dates.

Your Sun Movement Simulator is now ready to use. **Congratulations!**

*Move the sun to a given date and adjust the horizon to the desired latitude (North Pole:  $90^\circ$ , London:  $51.5^\circ$ , Equator:  $0^\circ$ , etc.).*

*Hold the simulator with the horizon level and move the sun arc from side to side. This way you can observe the sun's path through the sky from East to West.*

*From the parts [B1] to [B5] you can make a stand which can hold the model at any angle:*

**Step 6:** Cut out the inner stand parts [B1] and [B2] (Innere Sockel-Schiene) and glue their backs precisely on top of each other.

**Step 7:** Cut out the outer stand parts [B3] and [B4] (Äußere Sockel-Schiene), score the dashed lines with a blunt knife and fold them forwards. Put glue on the inner stand parts and stick them on the backs of the outer parts. The edge marked K should lie exactly on the fold lines of the outer stand parts. The rounded edge of the stand should now have a slit into which the simulator fits.

**Step 8:** Cut out the back of the stand [B5] (Sockel-Rückseite) and glue it onto the fold-outs of the outer stand parts.

Done! Now your Sun Movement Simulator can be put into its stand.