

The Solar Ring

Due to its easy handling and practical format, the solar ring is a widely used time measuring instrument, which looks back on almost an 400 year success story. Invented and developed in the 15th century by Peurbach and Regiomontanus, the solar ring – also called the farmer's ring – was used amongst the rural population up until the 19th century for simple time reading by the sun.

While most sundials determine the time of day via the sun's direction, the solar ring uses the sun's height to measure time. From sunrise the sun rises in the sky, culminates at noon and then loses altitude until it sets again in the evening. This diurnal arch of the sun occurs low or high in the sky, depending on the season, so that the day's date is taking into consideration during the measurement.

At the sun's highest level of the day (culmination) it is 12 noon local apparent time (LAT). This is mid-day, since in the truest sense of the word, it divides the day into two equal halves. People lived with this time, determined by the sun and only valid for their own location, until into the 19th century. Even today, the solar ring displays local apparent time, i.e. your own personal time at your location. For this reason, the solar ring's time, derived from nature, does not coincide with modern man's standard time (e.g. CET), which is established for his own purposes.

Instructions for use:

You can adjust the solar ring for time measurement in three steps:

1. Turn the date ring with its aperture to today's date (fig.1).
2. Place the neck chain in the slots and let the solar ring hang freely.
3. Turn the solar ring towards the sun on its vertical axis until light falls through the aperture and a light point falls on the inner edge. The light point is then positioned for the date (fig. 2).
At the winter solstice on 21 December on the left edge, at the equinoxes on 21 March and 23 September in the centre and at the summer solstice on 21 June on the right edge of the time scale.

Please refer to fig. 2 for the intermediate values. The date corresponds with the time of the sun's entry into the relevant zodiac sign.

4. Read the time off on the left in the morning and on the right in the afternoon.

Example: It is summer solstice on 21 June. Turn the ring to the uppermost position on the date scale. The light point on the inside of the ring is positioned on the right edge of the hour scale. It is morning, you can read off 10 am local apparent time (LAT).

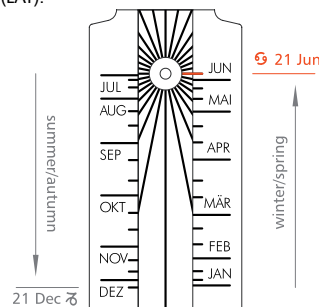
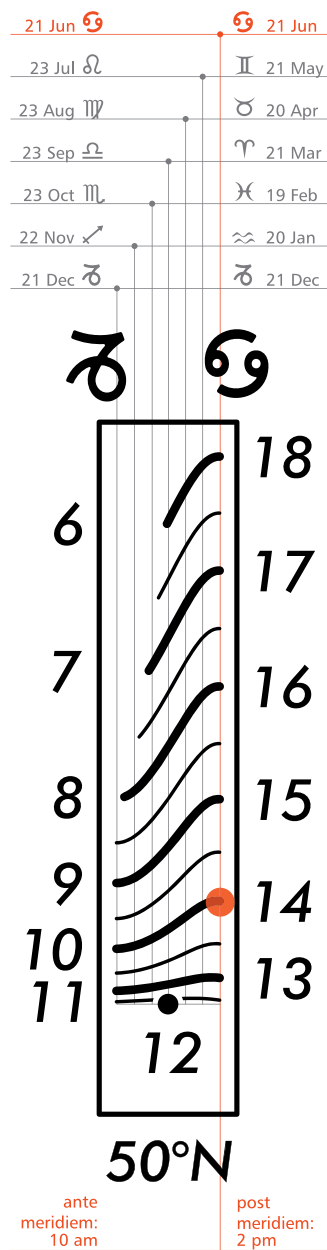


Fig. 1: Setting the date



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Fig. 2: Reading time