

YOU CAN SEE ...



BAADER PLANETARIUM

The Space Demonstrator

- an orrery
- within a star globe
- with star projection

Facilities unlimited – from simple observations like day and night, year, world-time, length of days, seasons, lunar and solar eclipses – up to spherical projection of the sky. This **MINIATURE MODEL OF OUR SOLAR SYSTEM** provides a multitude of approaches to really understand the mechanics of the heavens and its laws.

Owing to the unique combination of an electrically driven orrery and a semiopaque star globe, a 3-Dimensional effect is achieved which can never be observed on a normal planetarium. This synthesis of the heliocentric reality (orrery) and our geocentric point of view (star globe) is the secret which guides also the complete novice to an almost instant understanding of the various movements to be observed in celestial mechanics.

The Earth simply “marches along the constellations” during one year. Demonstrate the difference between sidereal and solar day simply by observing the annual movement of the earth first from the point of view of a fixed-star, followed by the view as looking from the sun. You will notice the known “one day difference”.

Project the night sky onto a ceiling or a projection dome, correct for any season, any night, any hour for a given position on Earth.

NEW projection lens option (Zeuner-lens): Projects the image of the Sun onto the ecliptic plane, opposite to the position of the moving Earth - as observed geocentrically.

THE EARTH'S MOVEMENT

ROUND THE SUN



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planetarium

Maybe long ago you happened to see the famous and only picture of Earth and Moon together “hanging in space”, which was taken by VOYAGER I on its journey to the outer planets. No image like this was existing in 1965 when the BAADER PLANETARIUM was first built, but exactly this vision lay in the mind of it’s designer. Today it is with you to compare how closely these two images match, the one taken from space and the one you actually see moving while viewing through the dark star globe. ●● The realistic Illusion of Earth and Moon “hanging In space on invisible wires” and at the same time the presentation of the Copernican System is one of the main aims of this Instrument. ●●● Still it can do far more; just follow the instructions, set the globe for your annual position and compare what you see in the sky! ●●● Within short you will learn that a BAADER PLANETARIUM is everything else but a toy and to really make use of its enormous capabilities the best way will be to place it on your desk and already by viewing and comparing reality with the model, you will find solutions for teaching and demonstrating, impossible even with large projecting planetaria.

TECHNICAL DESCRIPTION



- Two semispheres forming a globe of 50 cm (20”) diameter. Material – high strength acrylic glass of night-black color, **printed on outer and inner surface**. Outer printing showing yellow stars to fifth magnitude, constellation lines, white milkyway and blue coordinate grid; inner printing in white, showing only stars without any grid – as viewed from Earth.
- **Electrically operated orrery** with 6V current inside the globe - therefore safe for children. Continuous forward and reverse motion. Two grades of illumination – for continuous operation/ demonstration-mode **or** for projection-mode.
- Sturdy black plastic base, containing the electronics and two control-knobs for external control.
- AC-Power with CE-certified wallplug power transformer. Specify required voltage – 240V **or** 115V.
- During daylight the globe appears opaque, showing an inverted printing like every other star globe when viewed from outside. In a dark room however with illuminated Sun, the globe becomes transparent – but only on the near side facing the observer. The far side remains opaque, giving the effect of a hemispherical background of stars – now the sky is not inverted anymore! **Regardless of the direction from which the interior is examined, no observer will see the face of his companion at the opposite site.**
- **Star projection**; removing the diffusing sun-cover will produce a pinpoint light-source to enable a shadow projection of stars and constellations on a white ceiling or surrounding walls.
- In combination with our **Projection Dome** the globe can be adjusted to project the stars for any geographical and annual position. Note that the star globe is mounted **free on it’s base**. For correct adjustment of tonight’s sky the whole globe can be turned into any position.
- Incl. **60 mythological constellation images** on 5 plastic foils for projection or study
- Incl. dustcover for storage protection
- Incl. detailed instruction manual and scriptum **“The purpose of the Baader Planetarium”**.

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6 samples of 60 star constellations; simply cut out of carrier sheet and stick onto the globe to project onto a ceiling or projection dome.

