



Instruction manual



Box contents

1x Universe2go+ Star Viewer

1x removable cover

1x QR code card to download the instruction manual

Warnings

- Do not use Universe2go+ to look at the sun, risk of eye damage!
- Do not leave Universe2go+ in the sun
- Use Universe2go+ only in a safe environment
- Always insert the smartphone securely and tightly
- Children should only use Universe2go+ under supervision

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My personal planetarium Universe2go+

Thank you for purchasing the Omegon Universe2go+ planetarium. With this hand-held planetarium, you can spend many wonderful hours under the starry sky and get to know it better. Universe2go+ offers you so much more than a conventional star map. It allows you to see the starry sky along with constellation lines for orientation, as well as objects and object data. The audio function also provides you with all the interesting facts.

Universe2go+ has been developed further and is now more precise and more intelligent than its predecessor. As a result, it offers an even more impressive experience when the stars and digital information are merged. The menu navigation has also been redesigned for more intuitive use. All important functions are now available at a glance and even larger smartphones – with dimensions of up to 167x78x11 mm – can be used with the star viewer.

With Universe2go+ it's almost like being in a real planetarium, but under real conditions. Relax and enjoy the starry sky. Become an expert on facts about the sky.

1. Activation

1.1 Components

Universe2go+ consists of two parts:

Part 1: The "Universe2go+" app, which runs on the smartphone and

Part 2: The "Universe2go+" star viewer, into which the smartphone is inserted.

1.1 Download

First download the Universe2go+ app from the App Store or Google Play Store and install it on your smartphone. The app will be installed in German, English, French or Spanish according to your language settings.

You will need an internet connection to download the app. The app can then be used without an internet connection.

The app is constantly being developed further. Information on updates and new functions can be found at

<https://universe2go.com/en/>

1.2 Types of functions

The star map mode appears first when you open the app. Use the app without the star viewer in this mode.

Tap the display once for the menu. Here you can make various settings and switch directly to planetarium mode by selecting "Modes". With some mobile phone models that use Android as the operating system, it may also be necessary to tap twice.

The planetarium mode will then guide you through the night sky as an audio-visual sky guide. A detailed description of both types of functions can be found under point 6.

2. Set-up for using the star viewer

Universe2go+ can be used with many different smartphones with different dimensions, screen sizes, number of pixels and screen pixel densities.

Note: The system requirements can be found at the end of the instruction manual.

Note: The gyroscope, compass, location services, microphone and sound of your smartphone must be activated in the phone's settings (iPhone).

You can also get **online help** at <https://universe2go.com/en/> under the menu item "**CUSTOMER SERVICE**".

2.1 Adjusting the fit of the smartphone

The Universe2go+ star viewer can be customised to fit your smartphone perfectly. To ensure the right fit:

A Remove the enclosed foam pads.

B Open the lid of the star viewer. The positioning will be slightly different for different smartphone models, so you can use the pads to get the correct fit for your model.

C Place your phone in the retaining slot with the display facing downwards. The camera should be located on the left-hand side and the volume buttons should point in the direction of the star viewer. Position the mobile phone as centrally as possible in relation to the frame. Make sure that the camera and any control buttons at the side are not covered or pressed by the frame. Keep the camera and control buttons a little away from the frame if necessary.

D Now set the final position of your smartphone.

E Take the adhesive pads and place them (without removing the film) on the back of your smartphone. Now close the lid and check whether it closes properly.

F If you are satisfied, remove the film from the adhesive areas of the pads and stick the pads in the tested position on the inside of the lid.

2.2 Setting the interpupillary distance

To set your personal interpupillary distance for use in planetarium mode, go directly to the menu in star map mode and go to => Settings => Eyes => Distance. By scrolling up or down and tapping on the tick, you can adjust the interpupillary distance individually. The default setting is 65 mm. The interpupillary distance is required for use with both eyes.

Note: If you wear glasses, you will probably find your interpupillary distance in your prescription. If you do not wear glasses, try out different distances or measure your interpupillary distance with a PD

ruler. Setting the interpupillary distance is only necessary if the "Both eyes" option is activated in the settings.

3. Menu control

Start the app and tap once on the display outside a constellation to bring up the circular menu navigation. Tap to activate the menu items. If the menu is not used, it disappears after a few seconds and can be activated at any time simply by tapping the display again. In general, you always have the option of going back one step in the menu navigation by tapping the arrow in the menu circle or you can close the menu by tapping on the "X". [Fig. 1]

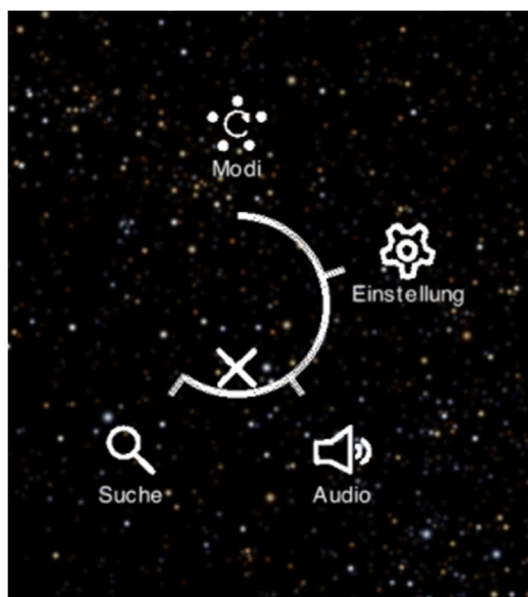


Fig. 1

As soon as you have switched to the "Modes" menu item and the smartphone has been inserted into the star viewer for use in planetarium mode, the menu navigation will be controlled by tilting your head instead of via the mobile phone display.

How do you activate menu navigation? To do this, turn the star viewer downwards towards the floor and then bring it up to the horizontal direction, i.e. as if you were looking straight ahead. This will display the menu.

To control and select the menu items conveniently in planetarium mode, we recommend that you do this in the viewing direction.

4. Star calibration

Universe2go+ orients itself by focusing on any star after the cover has been removed.

The camera on your smartphone needs a clear view of the starry sky for the app to achieve a high level of accuracy. If something blocks the camera's field of vision (e.g. your fingertip, tall plants or buildings), the recognition of the starry sky will be disturbed.

Locations with good all-round visibility are best suited.

If you have problems with detection during calibration, please follow these tips:

A Change your position and move away from metal objects (e.g. vehicles or railings).

B Avoid light sources such as bright street lamps. The darker your surroundings, the more accurate the calibration.

C Make sure that the Universe2go+ star viewer sits directly on your nose. Tilting the star viewer independently of the nose can lead to diminished sensor quality.

You can also check possible sources of error under the menu item Settings => General => Calibration.

Note: The stars can also be observed wonderfully and completely relaxed from a deckchair.

5. Navigation in the starry sky

Universe2go+ works best when you move from star to star in the sky. This allows Universe2go+ to re-align itself to the current star and ensures that the real and virtual starry sky correspond to the maximum possible extent.

Note: Aim at celestial objects as accurately as possible, as the star viewer is constantly recalibrating during observation. However, this also means that calibration will be less effective if you do not focus on the object but instead focus slightly away from it.

Note: To cancel the audio guide or return from the zoom view of a celestial object, briefly shake the star viewer from your wrist or generate the impulse by briefly shaking it up/down. After a few seconds, the audio stops, respectively the image zooms out.

6. The types of functions at a glance

There are various options available for exploring the starry sky.

6.1. The star map mode

The star map mode is automatically activated when you open the app. This mode gives you the opportunity to explore the starry sky with its stars, constellations, planets and deep-sky objects directly on your mobile phone screen during the day and you will be able to hear the description through the speaker.

You can use the "Search" menu item to search for stars, planets, constellations and deep-sky objects in the star map mode. You will find numerous objects sorted alphabetically in the corresponding sub-menu. As soon as you have selected an object by tapping it once on the screen, another circle will appear around the target circle with a line that you can follow. This will lead you to the object you are looking for. This object will be automatically zoomed in and you will hear the explanations.

You can also make various app settings in this mode via the menu navigation and under the "Settings" and "Audio" menu items. Details can be found under point 7.

6.2. The planetarium mode

Tap the "Modes" menu item to automatically switch to planetarium mode. In all of the subsequent sub-menus, you will see two images of the starry sky on the smartphone display. Please insert the smartphone into the star viewer to switch to planetarium mode. You

can use this mode only with the star viewer. You can use Universe2go+ with the cover attached both at night under the starry sky and during the day.

A Starter mode – This is the simplest mode, in which only stars and constellation lines are displayed. If you aim at a constellation name with the targeting circle, the constellation name will be enlarged and the constellation will be highlighted with red lines. If you keep the targeting circle on the enlarged constellation name for two seconds, Universe2go+ will start an audio explanation of the constellation.

[Fig. 2]

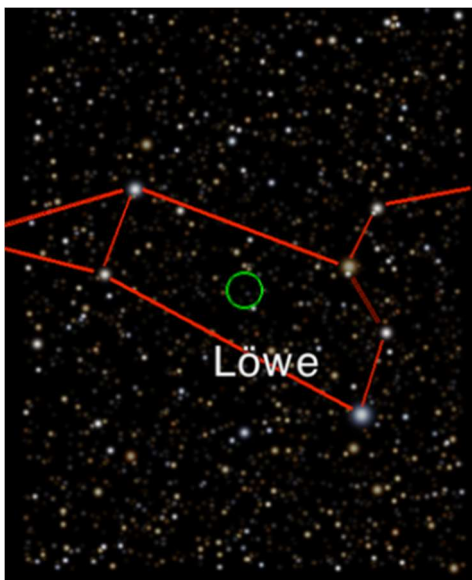


Fig. 2

B Explorer mode – In this mode you will get more information about the stars in the constellations as compared to the starter mode. If you aim at a star or planet in the display with the targeting circle, an information frame with the most important data will appear to the right of it. For brighter objects, you will also receive audio information on interesting facts and peculiarities. [Fig. 3]



Fig. 3

C Mythology mode – In this mode Universe2go+ tells you stories of the heroes, monsters, kings and beautiful maidens that the ancient Greeks associated with the stars. In addition to the lines, a drawing is displayed for each constellation.

If you aim at the name of the constellation, as in starter mode, you will be told an interesting story about the mythological figure after two seconds. [Fig. 4]



Fig. 4

D Deep-Sky mode – Here you can dive into the depths of space and discover distant galaxies, beautiful nebulae, magnificent star clusters and exploding supernovae that you cannot see with the naked eye. As with the stars, you can activate an information frame by focussing on the deep-sky object in the display. If you aim at the object for longer than two seconds, the display zooms in on the object. [Fig. 5]

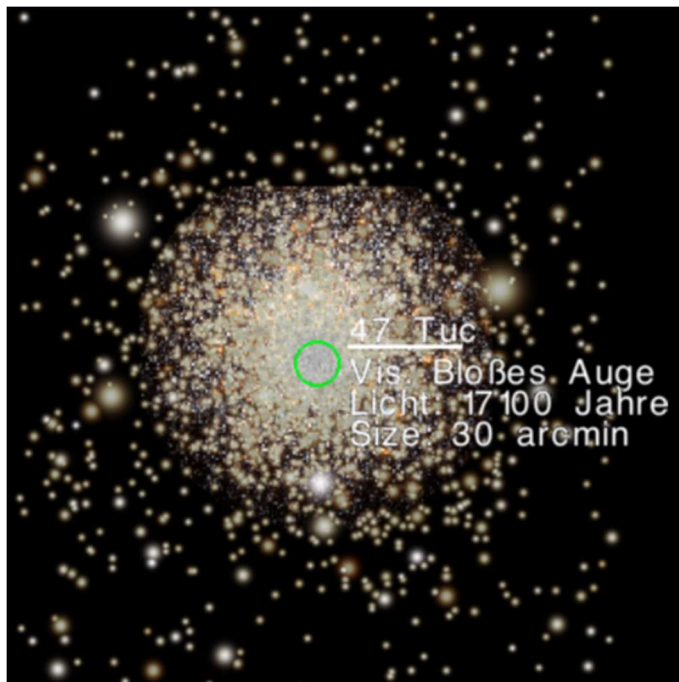


Fig. 5

7. App settings

You can make the most important settings within the app in the "Settings" and "Audio" menu items.

A Settings

Eyes: Here you can choose whether you want to view the starry sky with both eyes with augmented reality or whether you want the

visual elements to be imported into the star viewer for one eye only. Tap on "left eye" to activate or deactivate the import of digital information. Tapping on the icon again restores the previous status.

The display for both eyes is automatically activated when the device is used during the day, as the restriction only offers an advantage at night.

General: Here you will find information on Help Reset, with which help texts are repeated, and information on calibration, with which you can carry out a guided calibration check.

Under Snap Object, the device will determine the closest visible celestial object (star or planet) when it is held still and will correct the viewing direction so that the object is centred in the middle.

You will also find copyright information under this point.

Objects: This menu item includes stars, planets, constellations and deep-sky objects. Once you have decided on an object and activated it by tapping the icon, you can define your individual view details by tapping the respective symbol once again.

The next time you call it up, you will see that the symbol is crossed out – it will therefore no longer be currently displayed. Tapping it again reactivates it.

Info: Here you can customise which details are displayed for the objects, e.g. the name, type, size or distance.

For a particularly intense experience of the starry sky, we recommend reducing the brightness of your display as much as possible. This will give you the best possible view of the night sky behind the AR. You can make this setting in your mobile phone settings.

B. Audio:

When the "Sounds" icon is activated, a short signal is played as soon as a menu item is selected.

Tap/re-tap the music symbol to activate or deactivate background music.

8. Online help

Do you have questions about or any problems with the operation of Universe2go+? You will find further information at <https://universe2go.com/en/> under the menu item "**CUSTOMER SERVICE**". Here you will also find answers to the most frequently asked questions.

9. System requirements

Compatible smartphones:

Universe2go+ is compatible with various iPhone models and Samsung Galaxy models as well as many other mobile phone models that do not exceed the maximum dimensions and have the necessary sensors and the appropriate version of the operating system.

Maximum dimensions of the smartphone:

L 167 x W 78 x H 11 mm

Required sensors:

GPS, gyro, acceleration, compass

Supported operating systems:

iOS version 12.0 or higher, Android version 10.0 or higher
Subject to technical changes.

We hope you enjoy using Universe2go+.

It's time to go and discover the starry sky!