

Operating instructions

omegon



Omegon® DigiStar

Version 11.2019 Rev. B Art. No. 62236

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Omegon® DigiStar

Congratulations on the purchase of your new Omegon® DigiStar with a 4.3" monitor. This microscope is a precise optical instrument made of very high-quality materials that guarantee a long service life.

1. Preparation.

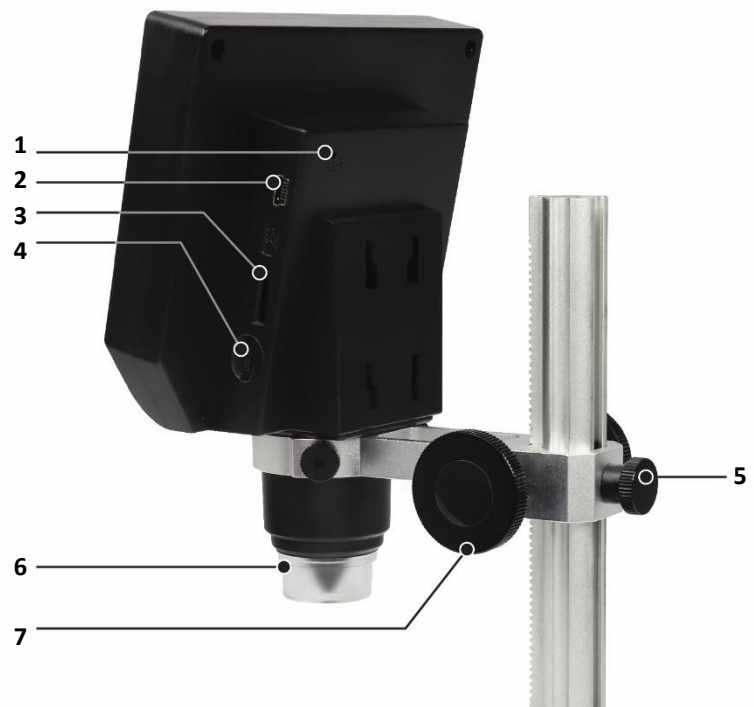
Before you start using your microscope, please read the instructions carefully to familiarise yourself with the functions and how to handle the instrument, and also to enjoy using your microscope. This microscope is a high-performance optical device with 1x - 600x magnification; the magnification is changed manually by changing the distance to the specimen. It is ideal for examining workpieces, minerals, insects, plant parts, coins, stamps, etc. The microscope does not have an eyepiece like conventional microscopes; instead the specimens are shown very clearly on a 4.3" display for viewing by several persons. You can also take photos and record short videos using the integrated camera.

1.1. Technical data.

- Digital camera HD 3.6 MP CMOS;
- Display: 4.3" HD LCD monitor;
- Resolution: 1080 x 720 pixel VGA;
- Aluminium rack-and-pinion column, stepless movement;
- Work distance 15 mm – infinite;
- Magnification 1x - 600x;
- 8 Longlife LED, adjustable brightness;
- Li-ion battery installed, continuous operation of up to 6 hours;
- Automatic shutdown: Off, 1 and 3 min.;
- Automatic shutdown of the LCD monitor: Off, 1, 3 and 5 minutes;
- Charging time: approx. 4 hours;
- Support thanks to a 64 MB micro SD card (not included);
- Cyclic recording: Off, 3 minutes, 5 minutes, 10 minutes. As soon as the memory on the memory card is full, the first video is deleted and the new video is saved automatically;
- Multilingual. The following languages can be selected: English, Spanish, Japanese, German, French, Korean, Thai, Russian, Portuguese, Italian, Turkish, Hebrew, Czech, Chinese Traditional and Chinese Simplified;
- Photo mode: 5M, 2M, 1,3M, VGA.

1.22. Delivery scope.

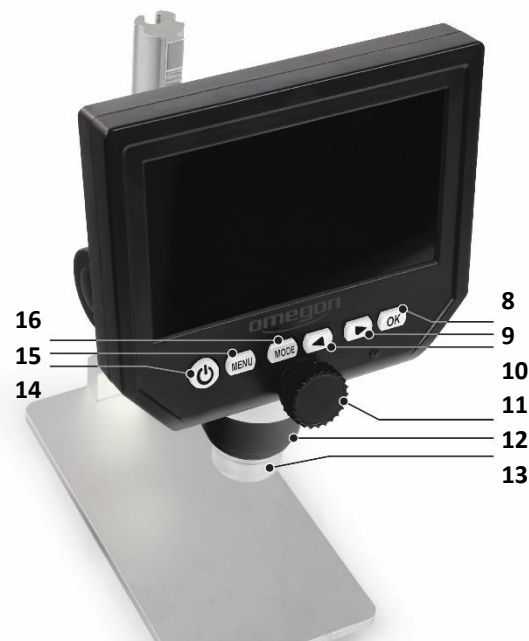
1. Reset;
2. Charging socket;
3. Micro-SD card slot 1-64GB;
4. Brightness control – dimmer;
5. Height adjustment screw – set movements;
6. Clamp screw microscope head;
7. Height adjustment – magnification by means of distance;
8. OK button: Photo or video on;
9. Left/right buttons for additional magnification, selector buttons in the menu and mode;
10. Left/right buttons for additional magnification, selector buttons in the menu and mode;
11. Focus;
12. Microscope shaft;
13. 8 LED Longlife lights;
14. On – off button;
15. Menu;
16. Mode;
17. Microscope base with rack-and-pinion column.



2. Commissioning.

Place the base with the monitor holder on an even and stable work surface. Pick up the monitor, place it in the designated holder and clamp it slightly with the two screw clamps left and right at the rear.

Now set the play in the rack-and-pinion column of the microscope so that it can be moved smoothly and with a slight resistance. This guarantees smooth and even operation. Now connect the monitor to the USB mains adapter provided, and charge the installed Li-ion battery fully first. Then switch on the monitor by pressing the button (14) for 3 seconds. The device switches on and is immediately operational. Use the dimming wheel (4) to set the required brightness of the 8 LEDs on the rear side of the monitor (right); these illuminate your specimen. Now bring your specimen into focus using the focus knob (11) on the front of the display.



Caution:

The clamp screws should not be tightened too tightly, otherwise, they could break.

Magnification takes place in one of two ways: manually up to 200x or there is a choice between 400x and 600xdigitally.

2.1. You move the entire microscope using the stepless height adjustment feature (6). This means that the magnification can be increased permanently up to 200x when brought closer to the specimen. You can simply correct the focus with the focus wheel (11).

2.2. Using the arrow buttons (9 + 10), you can choose from two other fixed levels 400x and 600x with a digital zoom. Then use the focus knob (11) to correct the image sharpness.

Menu button (15).

The word 'solution' is displayed first. This refers to the resolution that can be set between 1080 P, 720 P and VGA. If, for instance, you want to make a setting here, press the button 'OK' (8). The 'Cyclic balance' point is already described under 'Cyclic recording' item in the technical information. Automatic shutdown, the language, date, time etc. can be set in 'Menu', for example.

Mode button (16).

Record video mode:

Photo mode: 5M, 2M, 1,3M, VGA

Press the button to take photos

Play mode: Delete, lock / unlock

3. Maintenance.

Keep the microscope in a dry and clean place. If you want to transport the microscope, use one hand to hold the gear rack column or the base; do not hold it by the focus button, monitor or similar. Ensure that the monitor is placed tightly in the holder during transport and cannot fall out. Clean the outer surfaces (metal and plastic) with a damp cloth. Ensure that it is not too wet! It is advisable to disconnect the cable connection before cleaning the microscope. Otherwise the connector could become damaged. As the optical surfaces of the camera cannot actually be touched, these do not become soiled and are maintenance-free. If the 4.3" monitor needs to be cleaned, never use microfleece cloths because they can easily scratch the surfaces. Remove any dust with a small pair of bellows. Fingerprints or oily substances on the monitor can be easily cleaned with a small amount of glass cleaner and a soft cloth.

Caution:

Do not spray glass cleaner onto the display directly but onto the cleaning cloth instead.