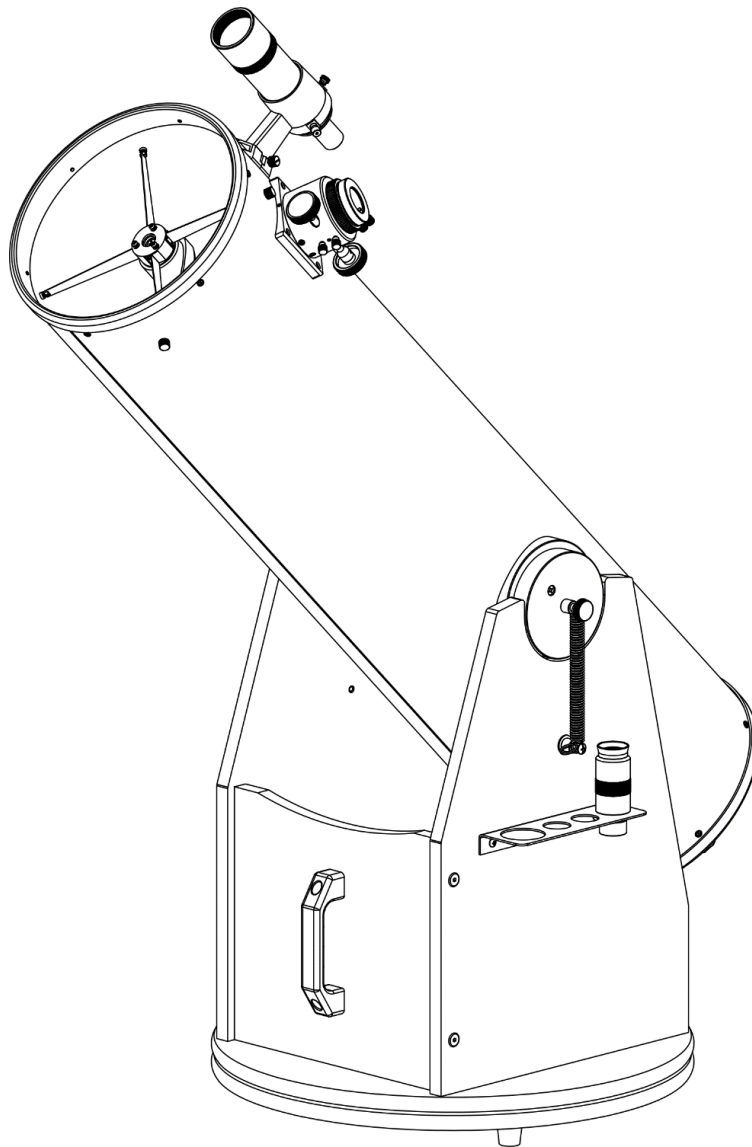


# Instructions Manual

**omegon**



***Omegon® Advanced X 203 DOB***

***Omegon® Advanced X 254 DOB***

***Omegon® Advanced X 304 DOB***

English version 4.2017 Rev A Art-Nr. 53802, 53803, 53804

## The Omegon® Advanced X Series

*Congratulations on the purchase of one of the new Omegon® Advanced X Series telescope. This telescope will give you hours of fun, with its optical precision polished mirrors and huge light gathering capability; it is the ideal companion for the beginner or intermediate amateur. It's simple design and optical quality makes the Advanced X one of the most exciting Dobson telescopes you will ever find in the market.*

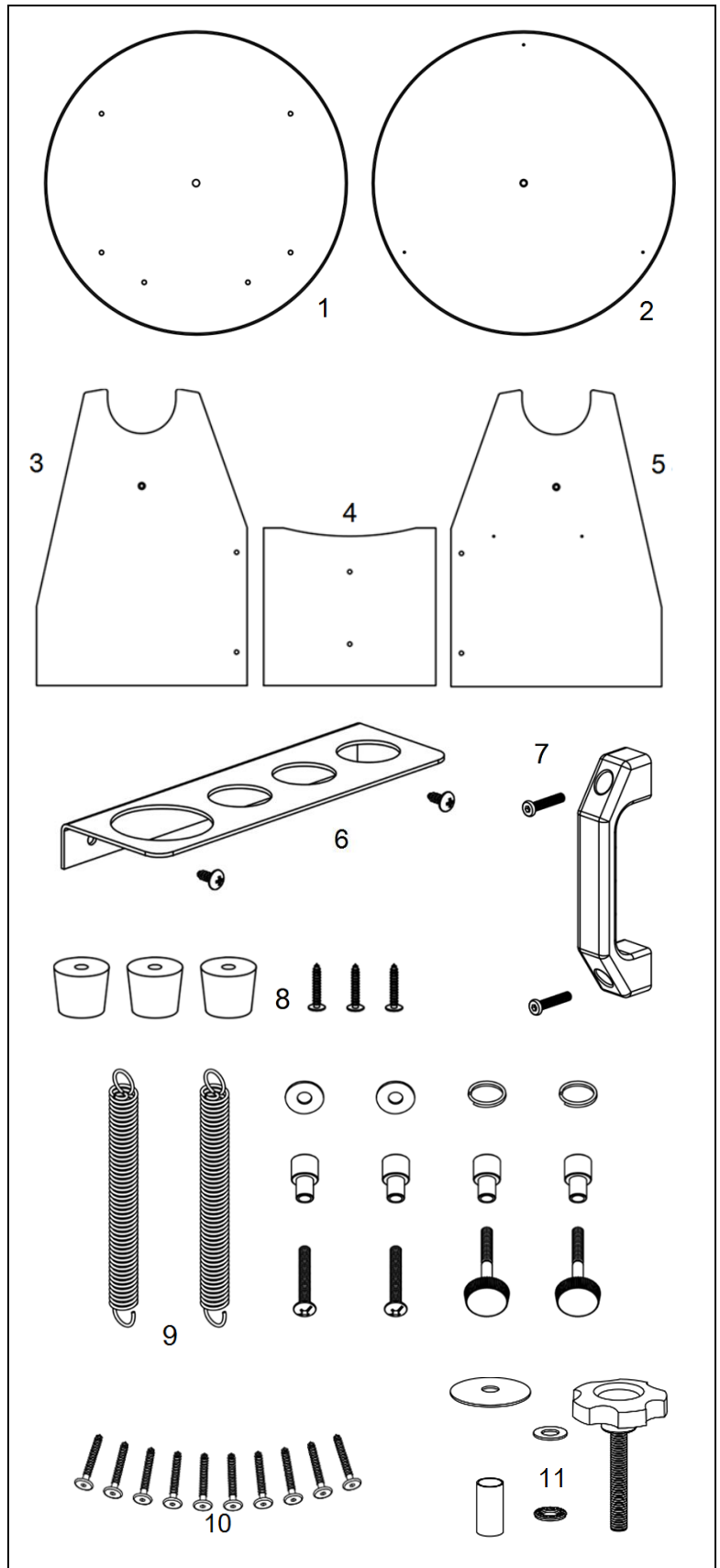
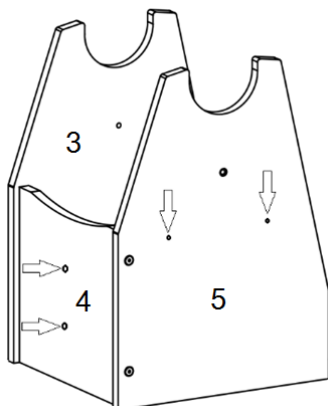
**1. What's included?** The telescope is shipped in two boxes. The tube box and the base box. To keep box volume to a minimum, the base is supplied disassembled. To assemble the base you only need a screw driver (Philips-type) – not supplied. Assembly takes about 20 minutes and all supplied parts and ware are easily put together. Below you can see the included base parts and ware. Please take a few minutes to familiarize yourself with it.

### Telescope base parts

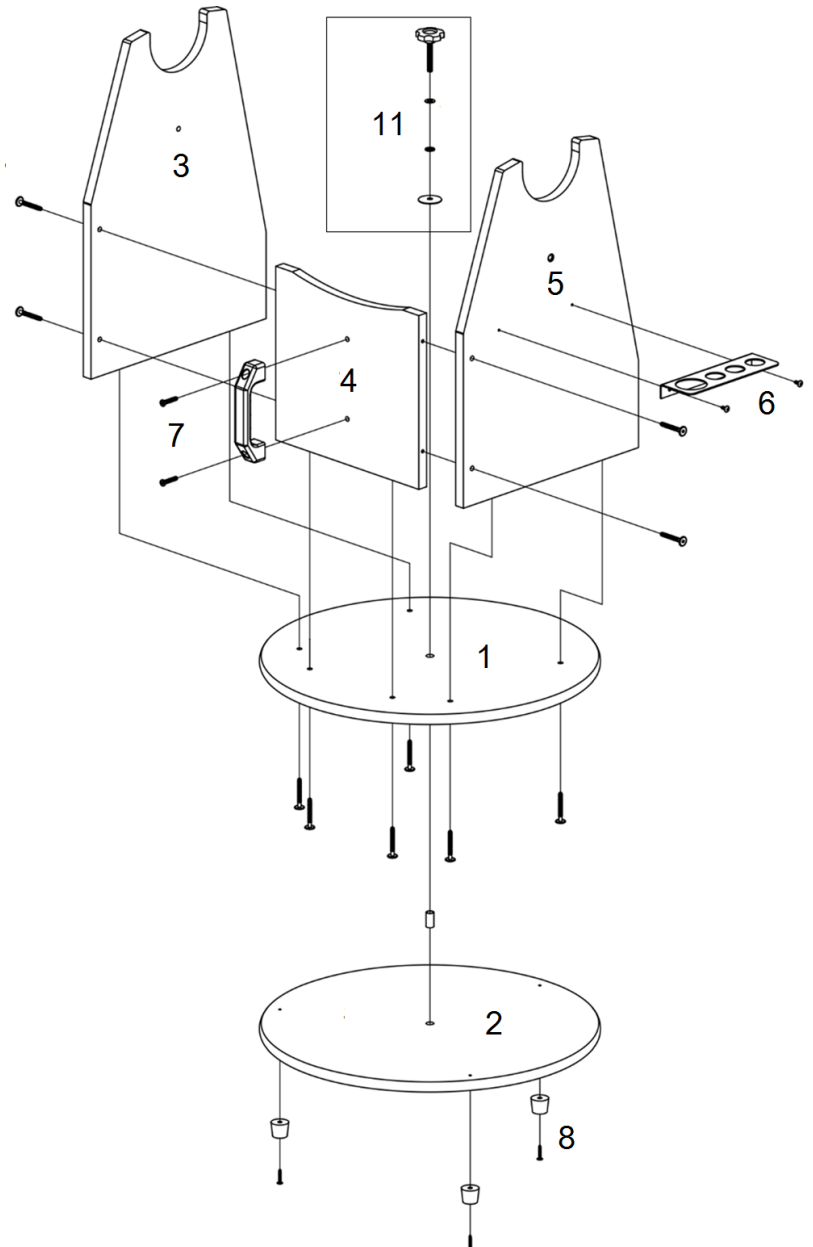
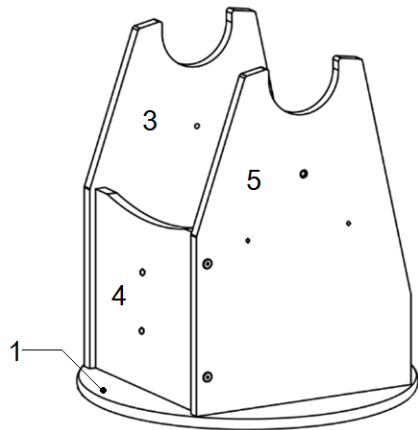
- |                            |                           |
|----------------------------|---------------------------|
| 1. Disc (top);             | 7. Handle & screws;       |
| 2. Disc (bottom);          | 8. Feet & screws;         |
| 3. Side panel (right);     | 9. Side friction kit;     |
| 4. Front panel;            | 10. Wood screws;          |
| 5. Side panel (left);      | 11. Azimuth friction kit. |
| 6. Eyepiece Rack & screws; |                           |

**2. Assembling the telescope base.** The telescope base is shipped in a flat cardboard box. Please provide a clean and flat surface where you can lay the parts and enough space to assemble it.

**2.1. Step 1 - Assembling the side and front panels.** Identify parts #3, #4 and #5. Used the supplied Allen wrench and 4x of the wood screws #10. Please notice that the side panels #3 and #5 are slightly different. Panel #5 has two additional holes to fix the eyepiece rack #6. The front panel #4 has two sides. Make sure that the metal washers are not visible from the outside. When Step 1 is finished make sure that the side panel (right) #3 is on the right side of this assembly and the front panel washer (plated) do not show to the outside - marked with arrows - below.



**2.2. Step 2 – Fixing the Disc (top).** Please use another 6x wood screws #10. Use the Allen wrench to tighten the screws. Please notice that the Disc (top) #1 has two sides. A side with circles cut in the wood's surface to hide the screw heads. Tighten the screws from this side.



**2.3. Step 3 – Setting the feet to the Disc (bottom).** Before proceeding with the assembly, set the 3x feet and screws #8 to the Disc (bottom) #2. Make sure to fix the feet to the side where the metal nut is flush to the disc's surface (arrow below). It is important to identify and fix the feet to the correct side.

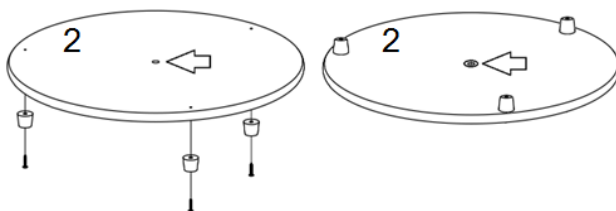
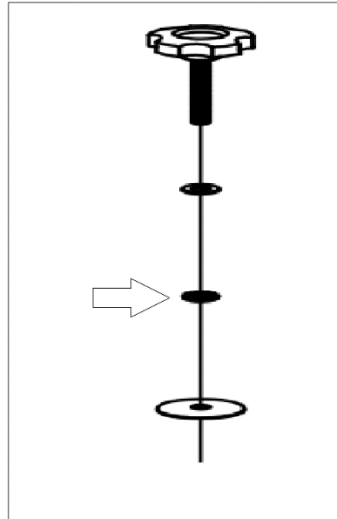


Figure 1. Exploded view of the complete assembly.

**Solar Warning!** Do not point the telescope to the Sun, concentrated light will cause irreversible eye damage and even blindness!

**2.5. Step 5 – Fixing the Disc (bottom) #2 to the pre-assembled wood parts.** Please proceed as shown. The handknob allows adjusting pressure to the Teflon© pads increasing/decreasing friction.

**Did you know?** The Hand knob adjusts the friction of the azimuth movement. If you feel that the movement on this axis is too smooth, just give a quarter of turn and tighten the central hand knob. This will visibly increase the friction making the movement stiffer. If on the contrary the movement is too stiff release the hand knob for a smoother movement.



**2.6. Step 6 – Setting the Handle #7 and eyepiece rack #6.** Use the supplied screws to fix both the Handle and eyepiece rack as shown in figure 1 and figure 2.

The one time assembly of the telescope base is now completed. It can be easily carried with one hand using the handle. The eyepiece rack can be used to store eyepieces and Barlow (not included) during observations.

The optical tube is the other main part of this telescope. It already comes pre-assembled. Its side bearings sit on the base's Teflon© pads. Depending on the weight of eyepiece, Barlow or finderscope the tube may tilt to the front or the back during observation. To avoid this inconvenient problem we have included a unique side friction kit #12 that allows increasing the friction between the Teflon pads and the side bearings. Please look at the main features of the optical tube and how to assemble the side friction kit #12.

**3. The optical tube.** Please look at the main features of the optical tube in the figure below.

**Optical tube features**

A – Side bearing

B – Focuser

C – Finderscope base

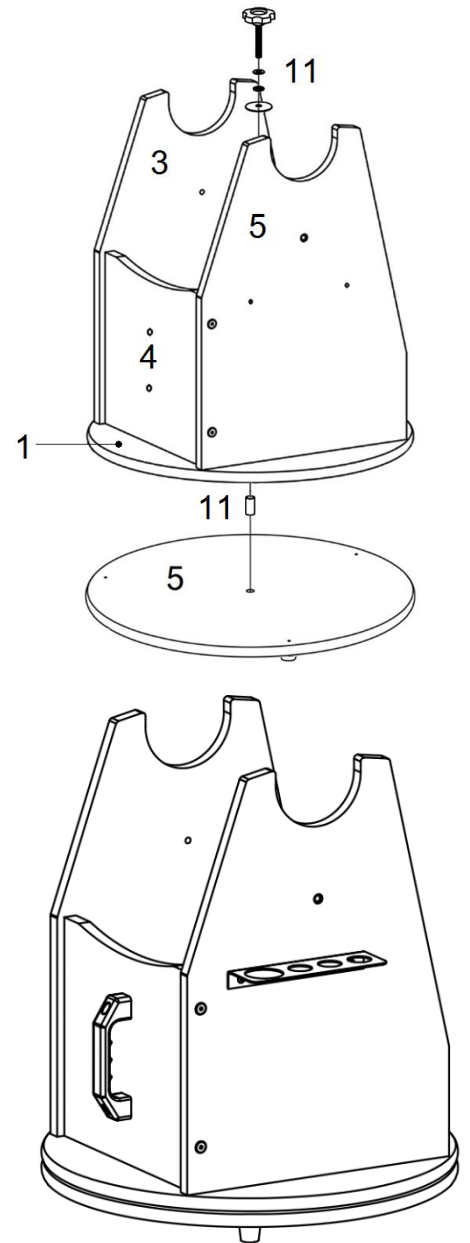
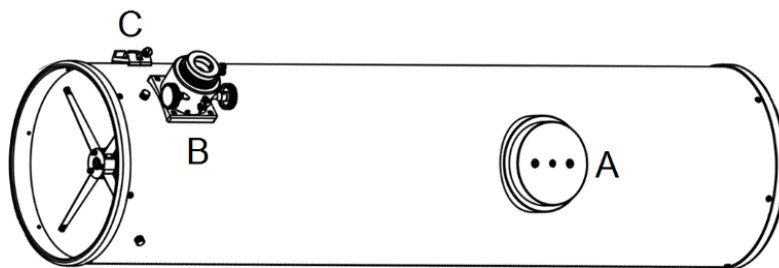


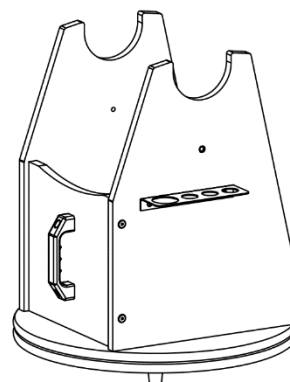
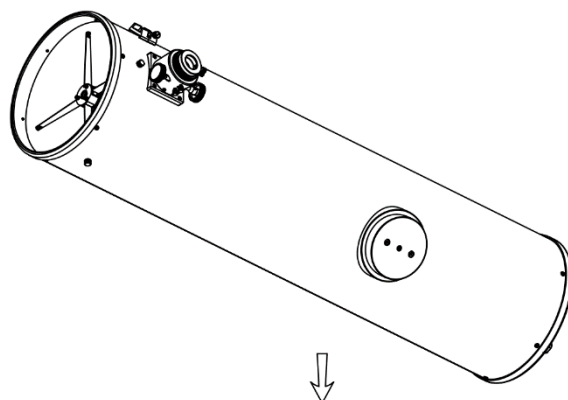
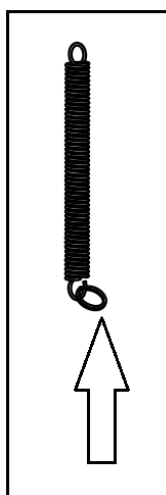
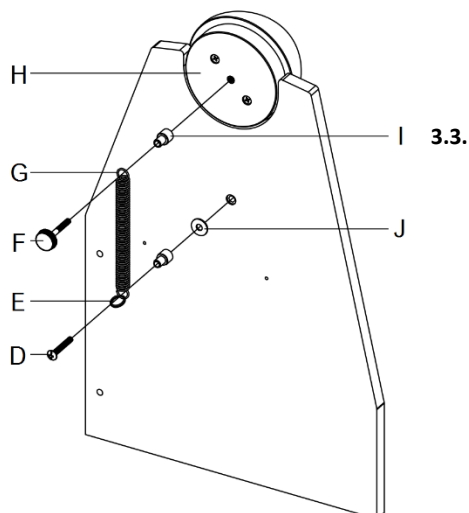
Figure 2.

A dust cap for the front aperture and for the focuser are also included. Please make sure to use it to protect the telescope from dust and humidity. The telescope should always be stored in a clean and dry place.

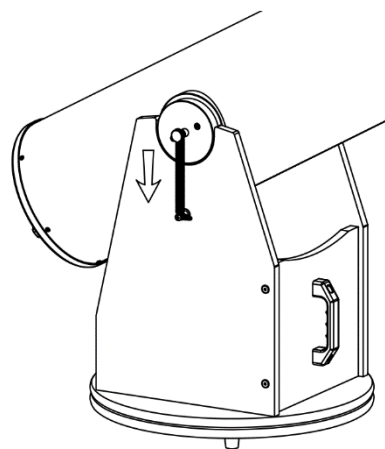
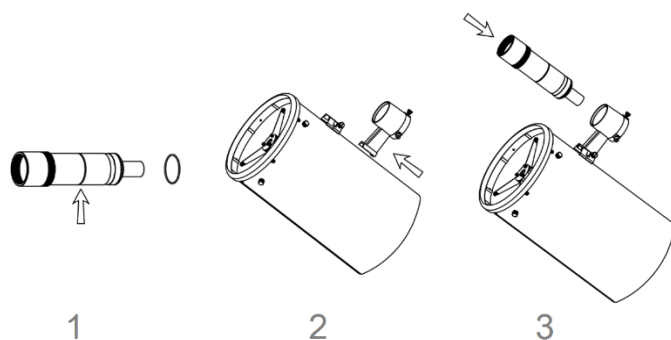
### 3.1. Installing the optical tube to the telescope base.

The tube fits to the assembled base as shown. For convenient transportation, both tube and base should set apart after each observation.

**3.2. Installing the side friction kit.** To increase the friction on the tube bearings a system of tensioning springs is used. As previously mentioned this avoids the inconvenient tilt of unbalanced telescope tubes. Please identify the different components and assemble it as shown. Make sure to loop the cord through one hook of the spring.



**3.3. Installing the Finderscope.** Start by sliding the supplied O-ring to the tube mark (arrow below). Next, slide the finderscope bracket and use the thumbscrew to tighten it in place. The finderscope tube can be fitted to the finderscope bracket. Make sure that the adjustment screws sit on the finderscope tube recess and the O-Ring on the front.



**How to use the tension spring?** Pass one hook #G to the nylon cylinder #I and use the locking knob #F to fix it in place. The spring will be loose. The opposite spring loop should be laced with the cord E. Stretch the spring pulling the loop and fitting it the other nylon cylinder. Do this to both side bearings.

#### Specifications

	<b>Advanced X 2013/1200</b>	<b>Advanced X 254/1250</b>	<b>Advanced X 304/1500</b>
Aperture	203mm	254mm	304mm
Focal length	1200mm	1250mm	1500mm
Focal ratio	f/6	F/4.9	F/4.9
Focuser	Crayford 2"/1.25" adapter	Crayford 2"/1.25" adapter	Crayford 2"/1.25" adapter
Eyepiece rack	yes	yes	yes
Eyepiece	Super Plössl 25mm	Super Plössl 25mm	Super Plössl 25mm
Finderscope	8x50	80x50	8x50
Extender	35mm	35mm	35mm